

AN ATLAS OF  
INSECT  
MORPHOLOGY



# **AN ATLAS OF INSECT MORPHOLOGY**

By

**H. STEINMANN C. Sc. (Biol.)**

and

**L. ZOMBORI**



**AKADÉMIAI KIADÓ, BUDAPEST 1981**

*Manuscript revised by*

**Z. KASZAB**

**Member of the Hungarian Academy of Sciences**

**and**

**G. SZELÉNYI D. Sc. (Biol.)**

*Latin text revised by*

**L. PINTÉR**

**ISBN 963 05 2213 6**

**© Akadémiai Kiadó, Budapest 1981**

**Printed in Hungary**

# CONTENTS

Preface 7	The leg 77
Introduction 9	The coxa 79
Plates 13	The trochanter 81
The wingless insect 14	The femur 82
The winged insect 14	The tibia 83
The head 15	The tarsus and the last tarsal joint 83
The frons 22	The wing 87
The clypeus 22	The venation 89
The labrum 22	The remigial region 92
The frontoclypeus 23	The vannal region 95
The clypeolabrum 23	The jugal region 96
The gula 24	
The gena 24	The abdomen 101
The pleurostoma 24	Typical genitalia of the male and female 104
The mandible 25	Protura 108
The maxilla 26	Diplura 109
The labium 28	Collembola 109
The antenna 30	Thysanura 110
Principal types of the insect head 32	Ephemeroptera 111
Mouthparts with mandibles 33	Odonata 112
Mouthparts of the licking type 35	Plecoptera 114
Mouthparts of the sucking type 37	Blattaria 116
Mouthparts of the piercing-sucking type 39	Mantoidea 117
The thorax 53	Orthoptera 118
The wingless thorax 54	Phasmoidea 120
The winged thorax 55	Dermaptera 122
The prothorax 64	Embioptera 124
The mesothorax 67	Isoptera 125
The metathorax 69	Coleoptera 126
The sternum 71	Psocoptera 128
The tergum 75	Zoraptera 129
	Hymenoptera 130
	Mallophaga 132
	Anoplura 132
	Raphidioptera 133
	Megaloptera 134

Neuroptera 136	The chaetotaxy of the thorax 161
Mecoptera 138	Sensory organs 162
Thysanoptera 140	Multicellular external process 164
Strepsitera 142	Multicellular internal process 165
Siphonaptera 143	The spiracle 166
Diptera 144	The auditory organ 167
Lepidoptera 146	The sound-producing organs 168
Trichoptera 148	The organ of Johnston 170
Heteroptera 150	The glands of secretion 171
Homoptera 152	The wing pattern 172
Appendix 155	The segmentation 174
Noncellular cuticular process 156	The articulation 175
Unicellular cuticular process 157	Indexes 177
The sensillum 158	Latin—English 179
The seta 159	English—Latin 214
The chaetotaxy of the head 160	

# PREFACE

The principal aim of the present atlas is to survey insect morphology as far as the imago's exoskeleton is concerned. Many books of a similar nature have appeared in the past, and though the subject is the same the treatment of our attempt is different.

Most authors on insect morphology wrote descriptive works with a wealth of information hidden in the text thereby necessitating that students interested in the superficial characteristics of a particular insect group should delve into voluminous books to select terminology for their special purpose. But since insects are so extremely variable in form, in the majority of cases the selection of the precise term to describe any particular feature presents quite a task. To further aggravate the problem many an author coined new words either to substitute older ones or to provide a name for a skeletal characteristic previously unnamed. Thus, there are scarcely any two works using identical terminology.

One of the most comprehensive works in the recent literature is the two volumes (the head and the thorax) of Matsuda, whose great merit is that he attempted to homologize insect morphology. Even so his books are basically descriptive presenting at the same time a string of arguments and counter-arguments to support the validity of one or another technical term, in many instances coining new ones, thereby once again rendering orientation difficult.

The majority of the figures have been adapted from literature sources, on the other hand, many have been newly designed, especially when illustrating homologized body regions: the reason for this approach was to convey the meaning in a simplified form.

*The Authors*



# INTRODUCTION

The structure of this atlas illustrating the general external morphology of the fully developed insect is quite simple. With the use of a wide selection of literature the authors have endeavoured to gather all relevant material, falling back on homologization where it was deemed necessary, to introduce students of morphology into the realm of common external characteristics of insect imagoes.

The external morphology of the insect is treated in parts broken down according to the main body regions shown in 756 line drawings. The parts include, in order, the homologized skeletal elements, the various appendages, the superficial apertures of the body as well as the copulatory organs as distinct from abdominal organs. The simple drawings fulfil one sole purpose: illustration, since in several instances we may encounter figures in which are illustrated all the principal skeletal features, obviously in nature such a form is quite unthinkable. Our purpose in doing this was to save place. Obviously when it has been thought necessary, though without the claim of completeness and without regard to special order, the authors have presented the principal types which diverge from the basic form. In other words, the principal types were to a certain extent designed to loosen up the otherwise strictly homologized and schematically represented figures. Even in the case of the principal types the authors declined to restrict any particular feature to one species, thus, in every instance the accepted lowest category was the genus, the highest the order. The figures in the plates are more or less related to one another, on the other hand, occasionally morphologically quite alien parts are placed side by side.

Subsequent to the atlas proper an Appendix is given which illustrates, in over one hundred figures, the superficial characteristics of the insect body. Illustrations here include the microsculpture, the noncellular, the unicellular and the multicellular external and internal cuticular processes or formations, e.g. spine, bristle, hair, suture, cavity, etc. Furthermore, one finds illustrations of the spiracle, the auditory organ, the form of segmentation and articulation, the openings of various glands and the wing pattern.

In order to identify any particular part of the body with certainty the terminology is given in Latin. In several cases decisions had to be made after careful consideration of the available terms. In accepting a term into the atlas our governing principle was to choose the most commonly used descriptive word or expression whose functional content is most readily conceivable among the host of synonyms. Here the authors would like particularly to stress that when a name was selected to describe a bodily feature, in fact no overruling decision had been made for the supremacy of that one term, thus, all the other perhaps similarly frequently used names may equally be correct, and the authors had no intention of suppressing any one word or expression. It is all the more important to bear this in mind since many specialists working on one particular group of insects adopted a terminology of their own and these terms have a standing of several decades or perhaps

even of two centuries. However, some of these terms (given in italics) had to be included in the indexes to help those trying to solve a problem solely by means of the indexes. All the special expressions would in fact need a separate volume. The validity of many a word describing the very same bodily part is unquestionable, since an anatomical or morphological term may be formed in several ways. Among these the commonest is the single-word expression, thus, the foot-stalk of the maxilla is the *stipes*. In other cases, a concept may be approached from several other directions, all being correct, e.g. between the cheek and the *pleurostoma* a thin line is present, this we might call the lower margin of the cheek (*clavus genalis ventralis*), or the upper margin of the *pleurostoma* (*clavus pleurostomatalis dorsalis*), but we are aware of another, somewhat vague expression: *linea marginalis*, when the accepted and currently used term is *sutura subgenalis*. Of course, all these variations will not figure in the indexes as synonyms owing to lack of space. A general expression, e.g. the maxilla (Fig. 61), refers not to the maxilla of a butterfly, of a beetle, of a dragonfly, but that of *an insect*, since it is homologized. Also the present authors deferred from using the word, e.g. *pars*, and its corresponding synonyms, because it was restricted to one particular conceptual sphere, and all the more so did the authors bear this in mind since in the literature these words are employed rather arbitrarily. Thus, our Fig. 61 depicting the maxilla with its movable parts may equally be called *pars maxillaris*, or *area maxillaris*, or *regio maxillaris*.

With a view to completeness the authors endeavoured to illustrate and thereby to introduce as many bodily parts and their respective current morphological terms as were possible. However, again owing to shortage of space, certain obvious analogies were not given despite the fact that they exist. For example, when a given part, say a plate, was further differentiated, and it had a process at its front margin, it appeared as the anterior process of the plate; if it also had a posterior process it was either illustrated and given a name, or it was left wholly unnamed.

The figure captions are in English. Figures connected with one another in the caption are separated by a comma, parts not strictly related by a dash. In parentheses at the end of each figure caption the names of the authors of the respective source books are given in alphabetical order. The major part of the material is to be found in various anatomical and morphological works in the world literature. In the case of a general figure of mere reference value, it is not a practice to give the relevant source, thus, the original work of some of the drawings is today well-nigh impossible to trace and has little significance anyway. Following this principle those figures which are the result of the present authors' original research are similarly not marked by the word "original" or otherwise.

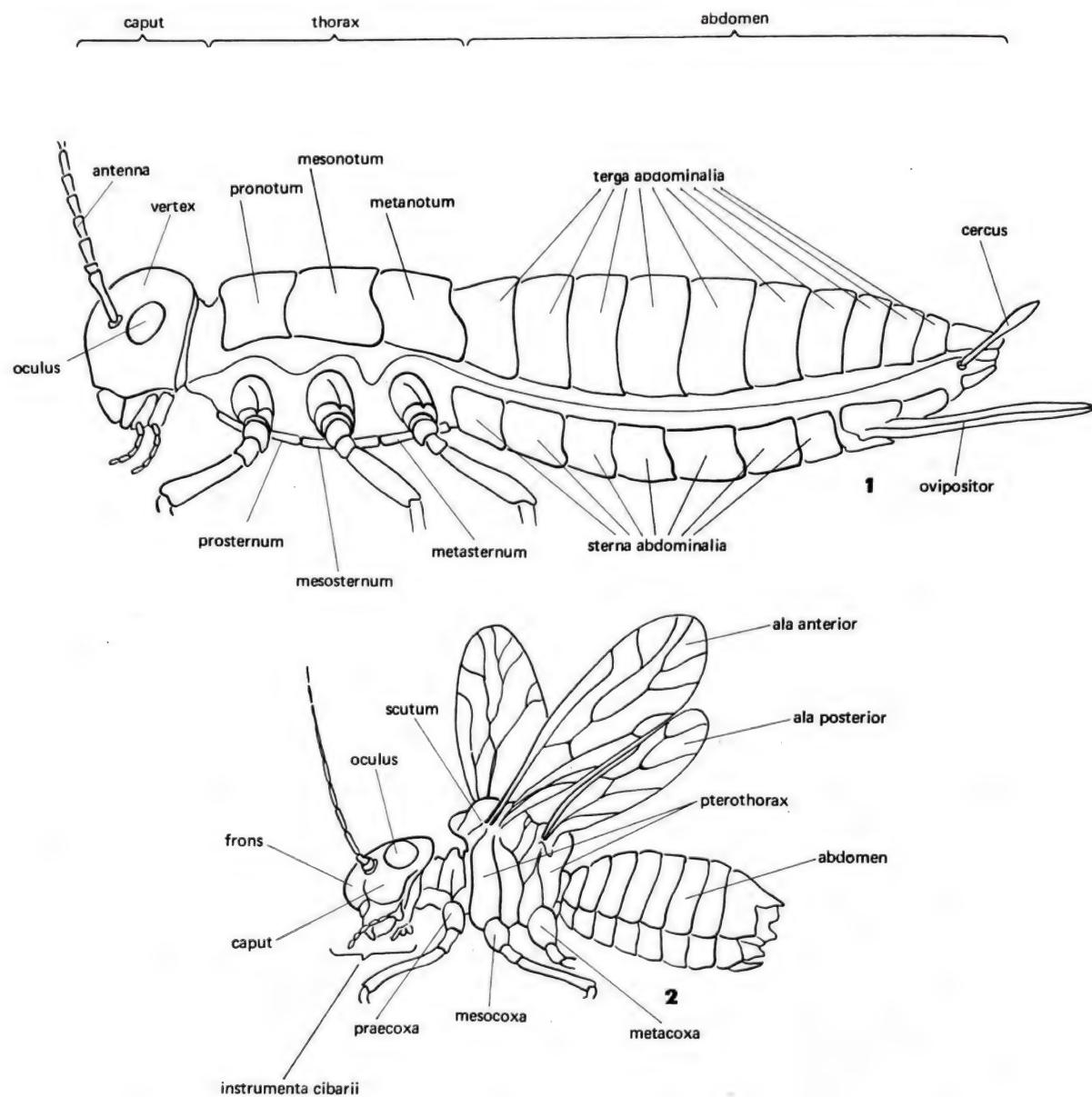
After the atlas part the two indexes are appended: a Latin—English and an English—Latin. Perhaps a few words are not wholly out of place here concerning this section of the book. First, it would be far more precise to say Latin/Greek—English and English—Latin/Greek indexes, since in numerous instances the literature uses Greek words and in even greater number words of Greek derivations. Secondly, it is frequently possible to find in the literature words with a correct Latin ending, e.g. *pleura*, which in fact is the plural form of the original Greek *pleuron*; but some authors take the word to be a singular Latin noun and suffix the Latin plural ending -e for the feminine noun obtaining "pleurae" (used in human anatomy) wishing to determine the two lateral regions of what is generally a thoracic segment of the insect body. Even though it is far beyond the

scope of the present work to clarify linguistically all the problematic derivations, to enhance utility coupled with accuracy the applied terms have been carefully selected and linguistically checked. Thirdly, in the case when the original Greek as well as its Latinized version are also used, we were inclined to employ the more commonly used form, as mentioned earlier. Thus, we simply compiled an index of the words figuring in the plates, complementing these with some of their more important synonyms; we did this in order to provide a tool at its most appropriate place.

The indexes are arranged in an absolute alphabetical order, and the words are given as they appear in the plates. Words are given in their correct orthographical form except in some rare instances when a form although objectionable has attained such wide recognition in world literature that the correct form would appear out of place, an example of this is *coxopodite* for *coxapodite*. In the case of adjectival structures the Latin—English part presented no problem since the nouns, e.g. *clavus*, *fossa*, *sutura*, etc. are always at the beginning of the expression, which does not hold, of course, for the English—Latin part. Just the same, there too the present authors followed strict alphabetical order. After the word-pairs the numbers refer to the respective figures.



# PLATES



Figs. 1–2. Schematic drawing of the insect in lateral view. — 1: Wingless, and 2: winged (after Kéler 1, and Weber 2)

# THE HEAD

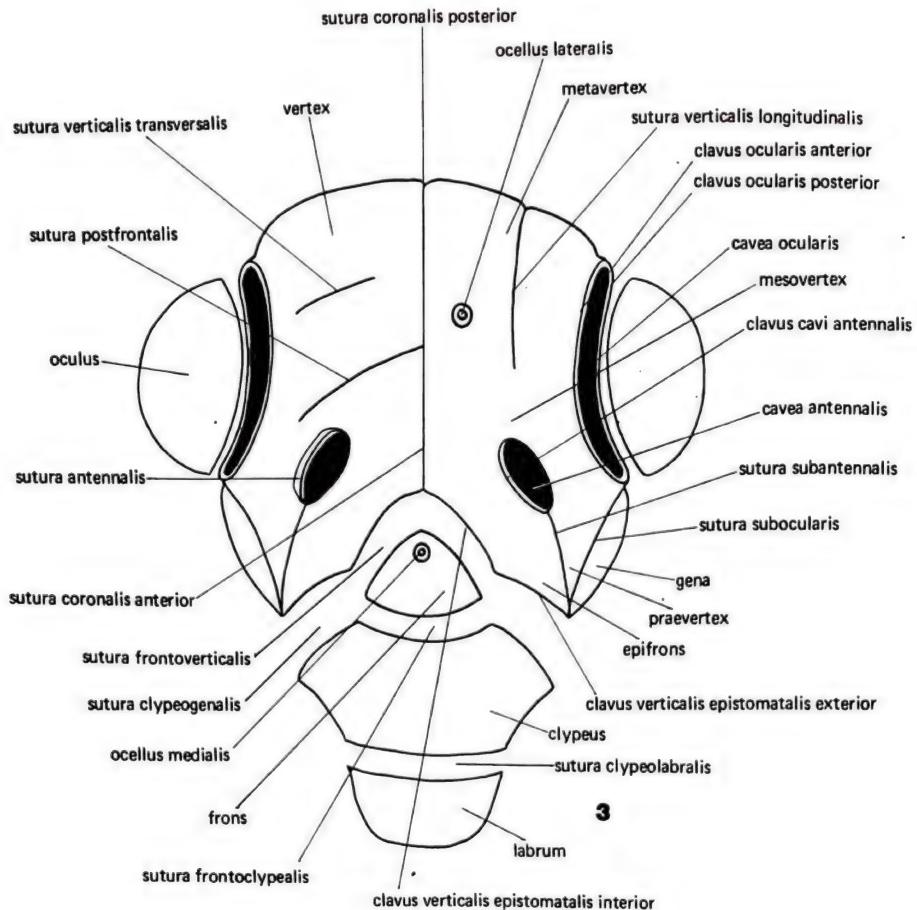
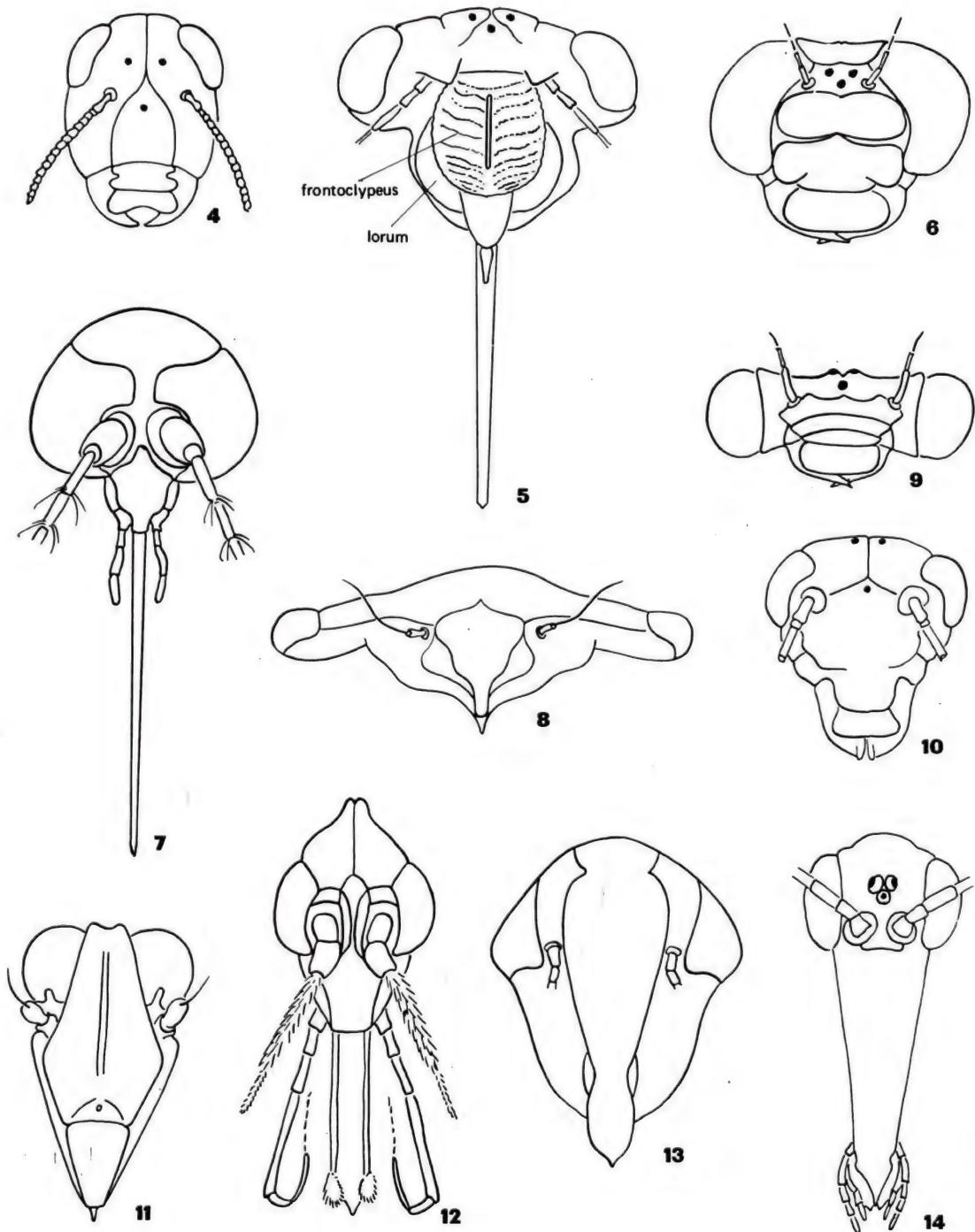
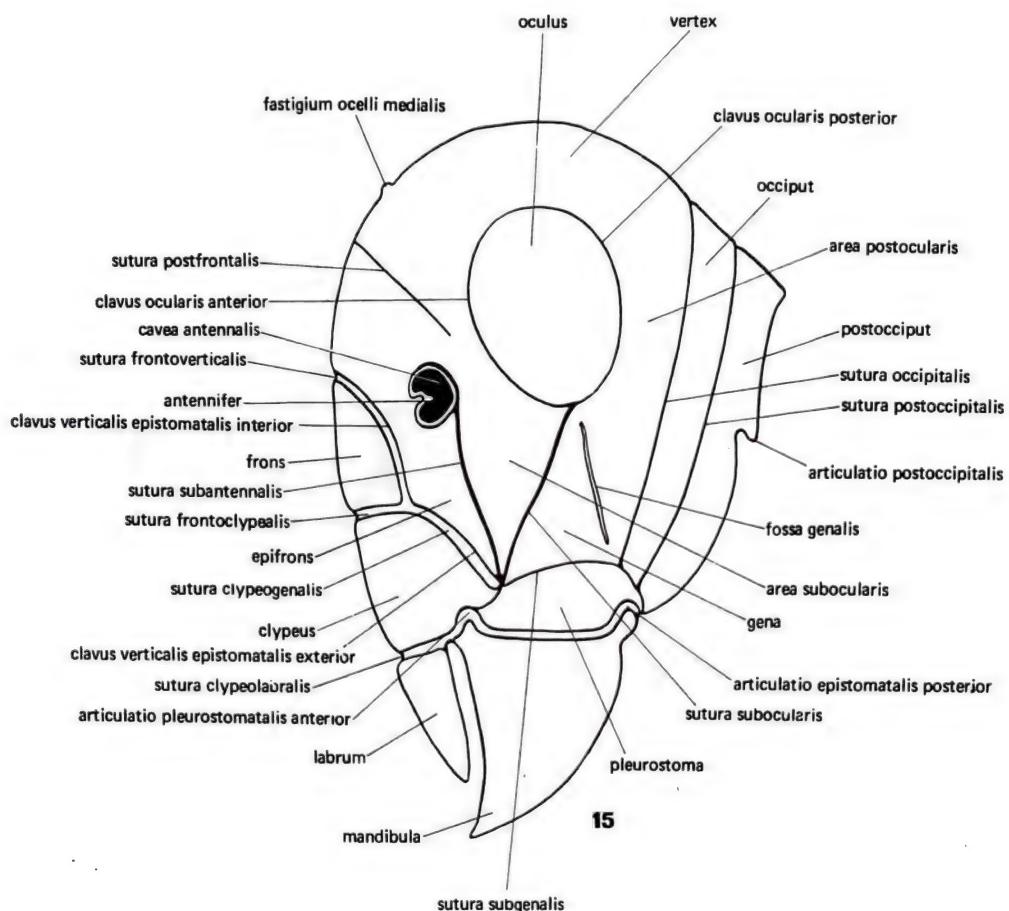


Fig. 3. Schematic drawing of the insect head in frontal view

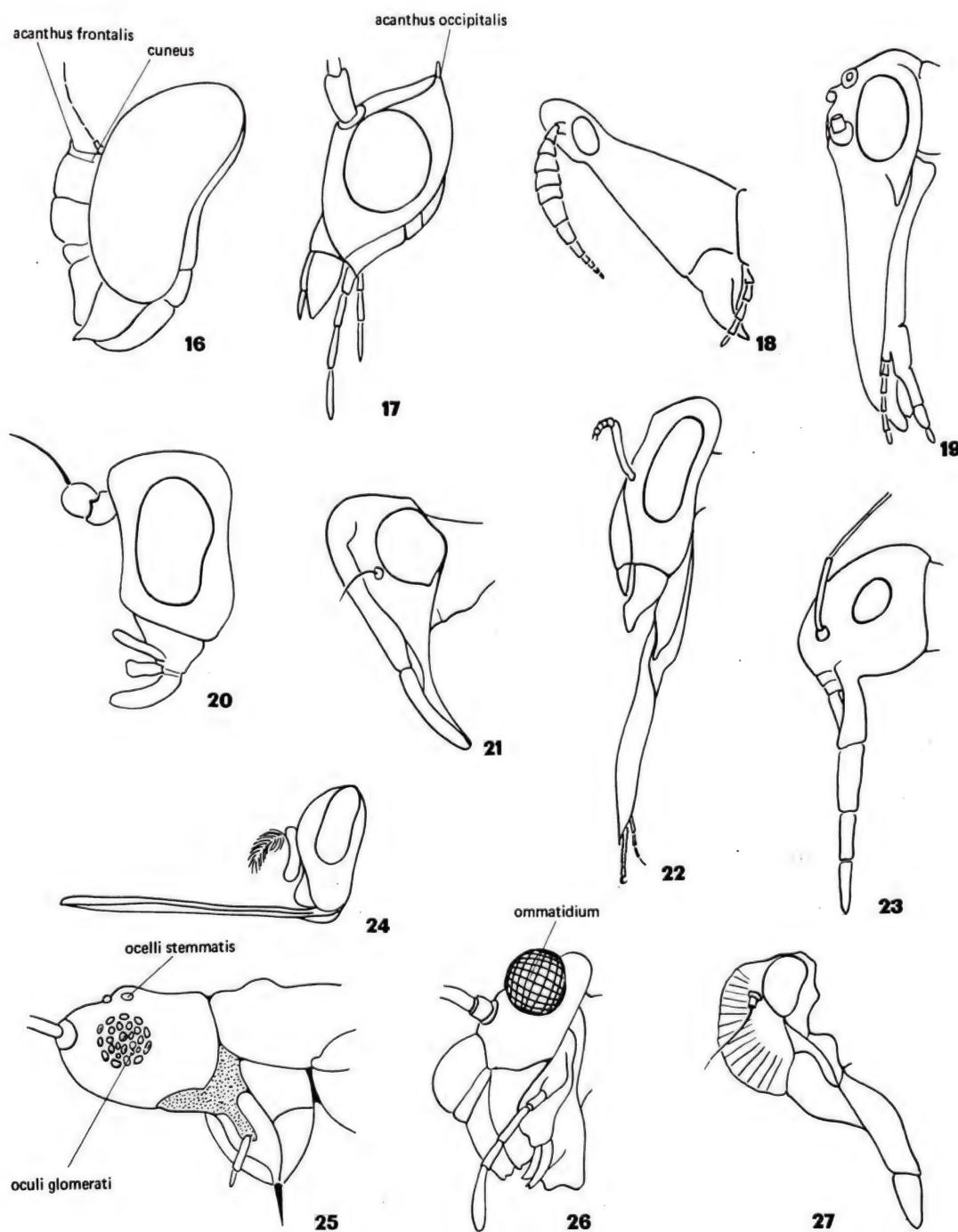


Figs. 4–14. Principal types of the insect head in frontal view. — 4: *Schistocerca* (Orthopt.), 5: *Magicicada* (Homopt.), 6: *Anisoptera* (Odon.), 7: *Culicoides* (Dipt.), 8: *Membracidae* (Homopt.), 9: *Zygoptera* (Odon.), 10: *Hymenoptera*, 11: *Fulgoridae* (Homopt.), 12: *Psychodidae* (Dipt.), 13: *Heteroptera*, and 14: *Panorpa* (Mecopt.) (after Shvanvich 5, 12, Snodgrass 4, 8, 10, 11, 13)



15

Fig. 15. Schematic drawing of the insect head in lateral view



Figs. 16–27. Principal types of the insect head in lateral view. — 16: *Sympetrum* (Odon.), 17: *Wesmaelius* (Neuropt.), 18: *Acrida* (Orthopt.), 19: *Panorpa* (Mecopt.), 20: Diptera, 21: Homoptera, 22: *Apis* (Hymenopt.), 23: Heteroptera, 24: *Culicoides* (Dipt.), 25: *Thrips* (Tysanopt.), 26: *Psocus* (Psocopt.), and 27: *Magicicada* (Homopt.) (after Shvanich 21, 22, 25, Snodgrass 20, 24, 26, 27)

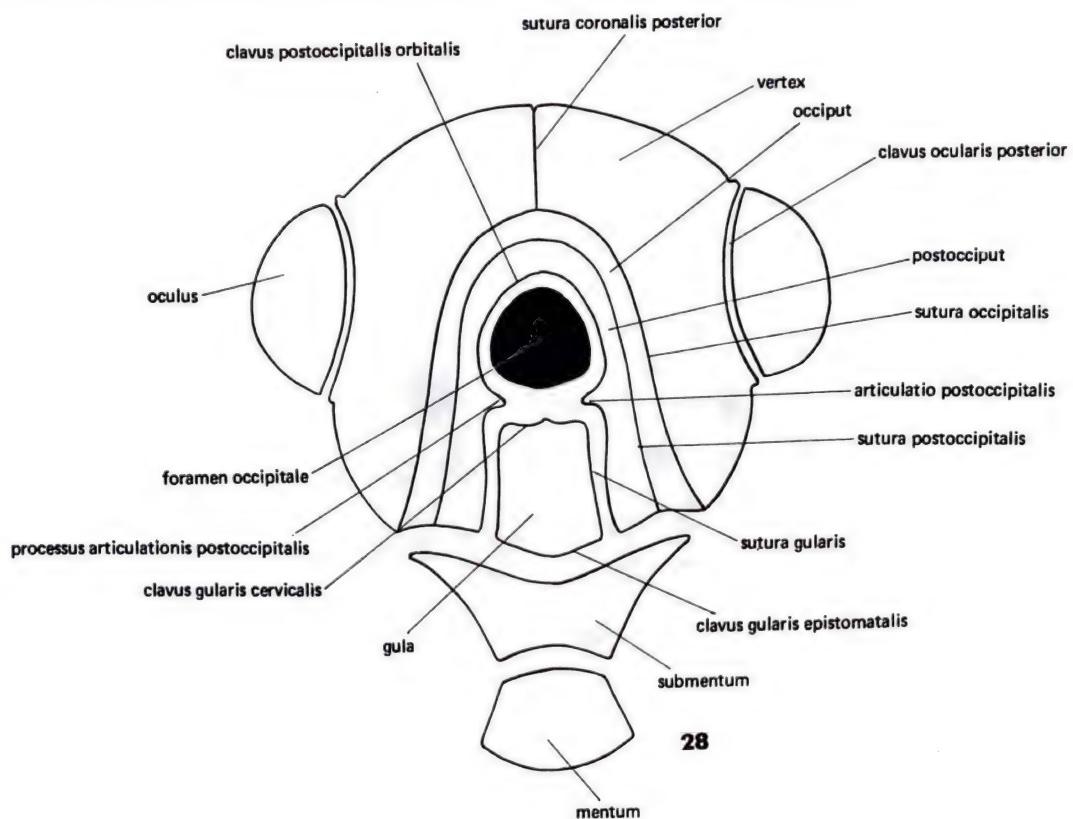
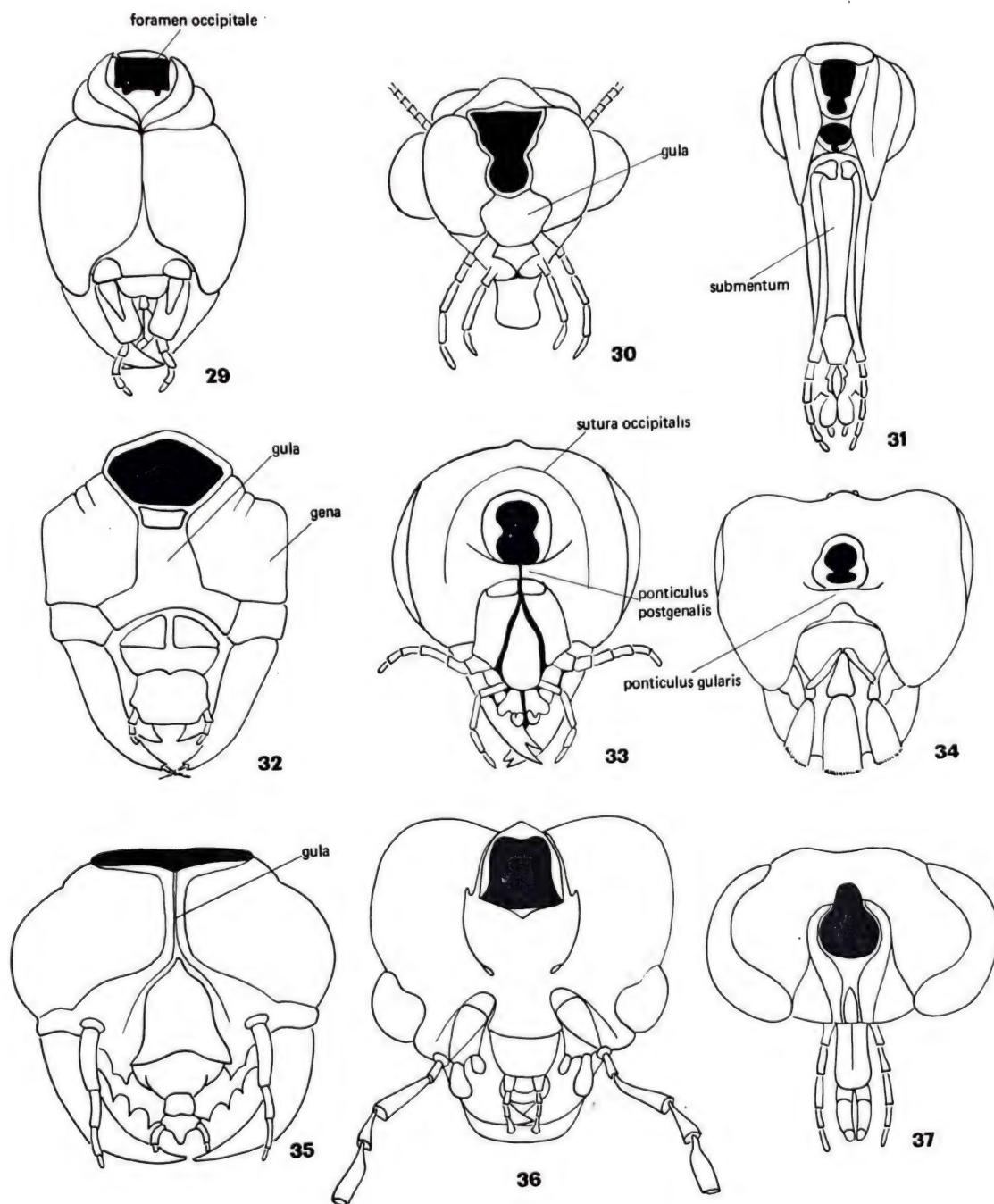
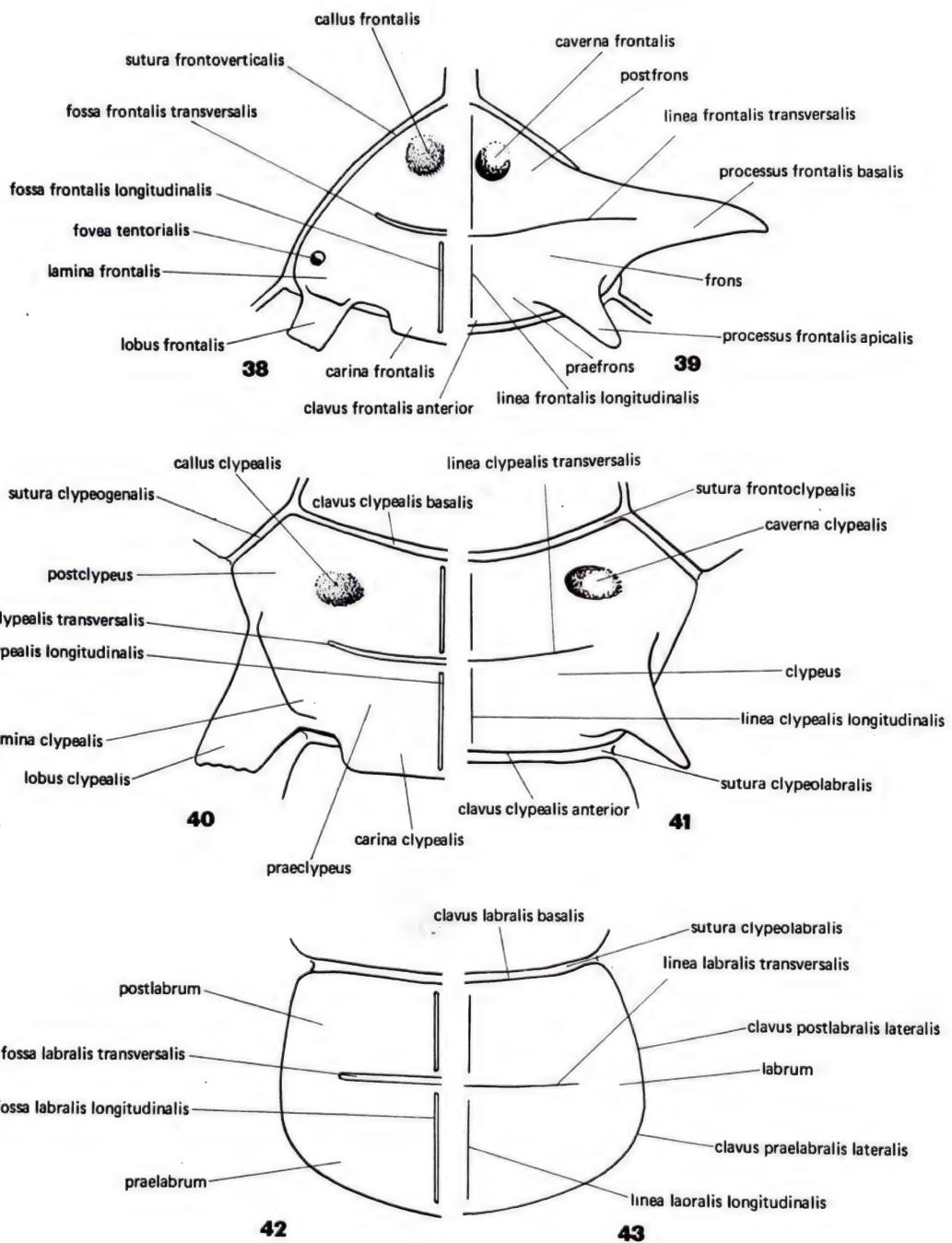


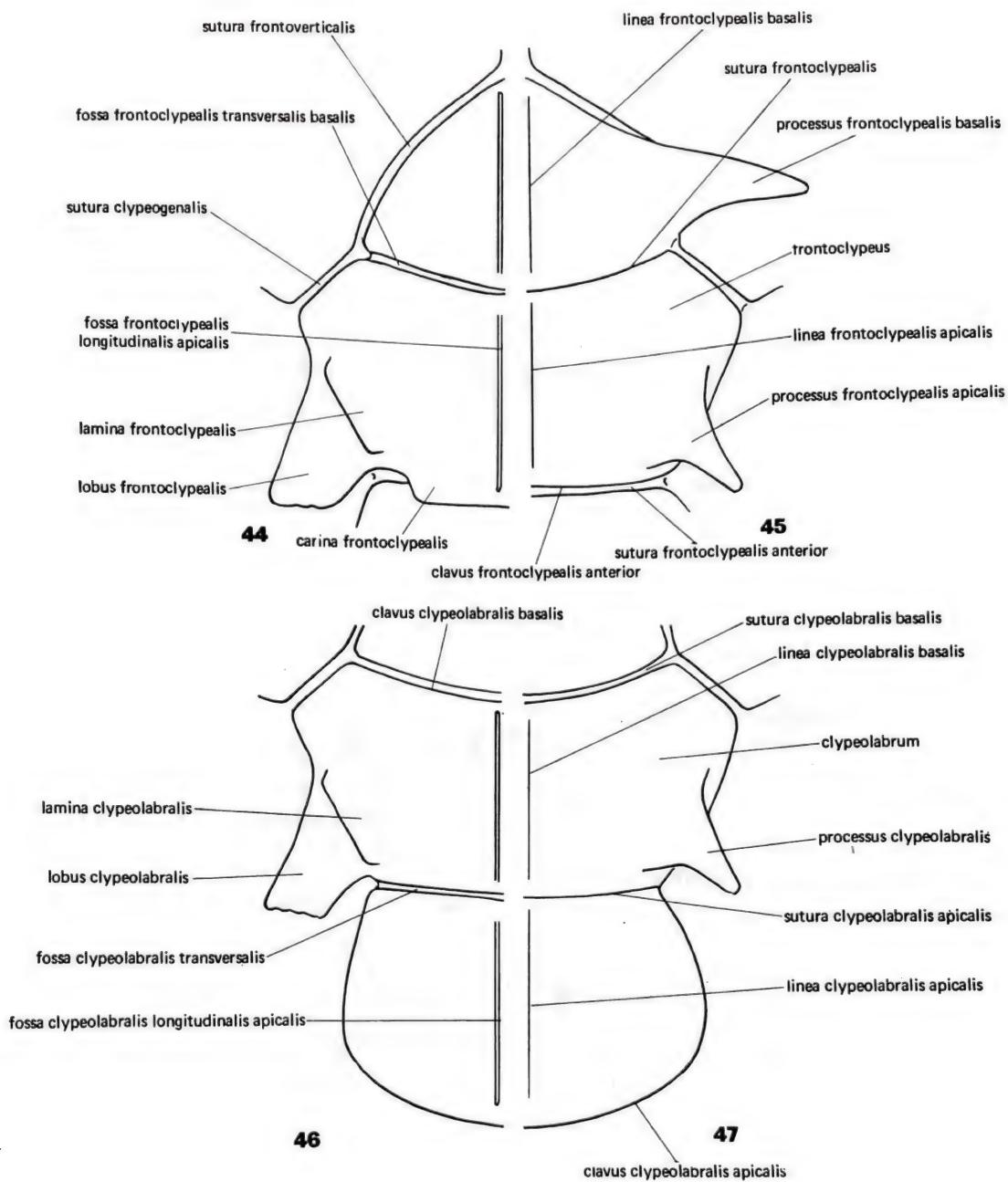
Fig. 28. Schematic drawing of the insect head in posterior view



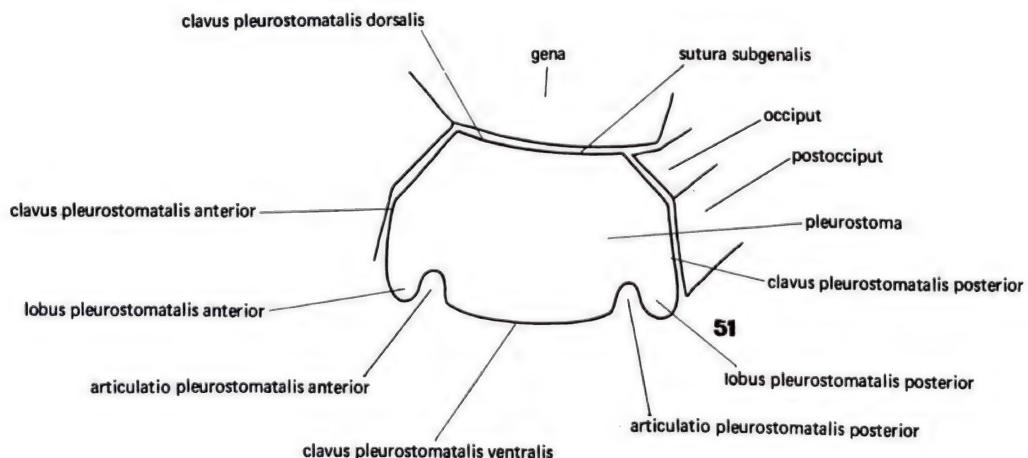
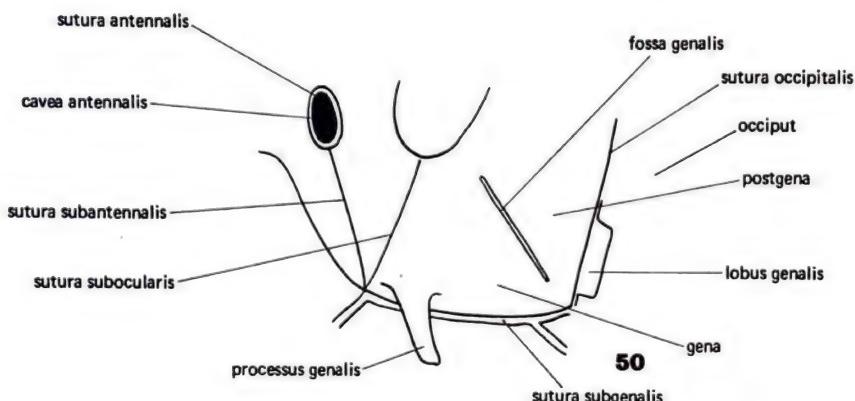
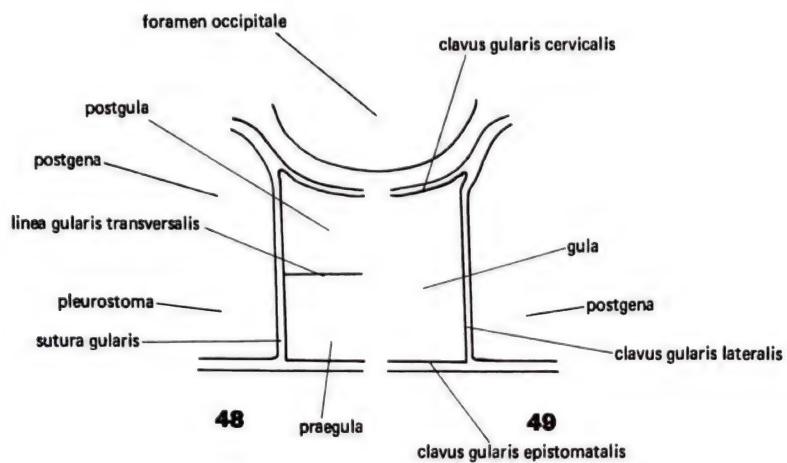
Figs. 29–37. Principal types of the insect head in posterior view. — 29: *Staphylinus* (Coleopt.), 30: *Myrmeleon* (Neuropt.), 31: *Panorpa* (Mecopt.), 32: *Sialis* (Megalopt.), 33: *Vespa* (Hymenopt.), 34: *Apis* (Hymenopt.), 35: *Thinopinus* (Coleopt.), 36: *Melandrya* (Coleopt.), and 37: *Culicoides* (Dipt.) (after Shvanich 33, and Snodgrass 29, 32, 34–37)



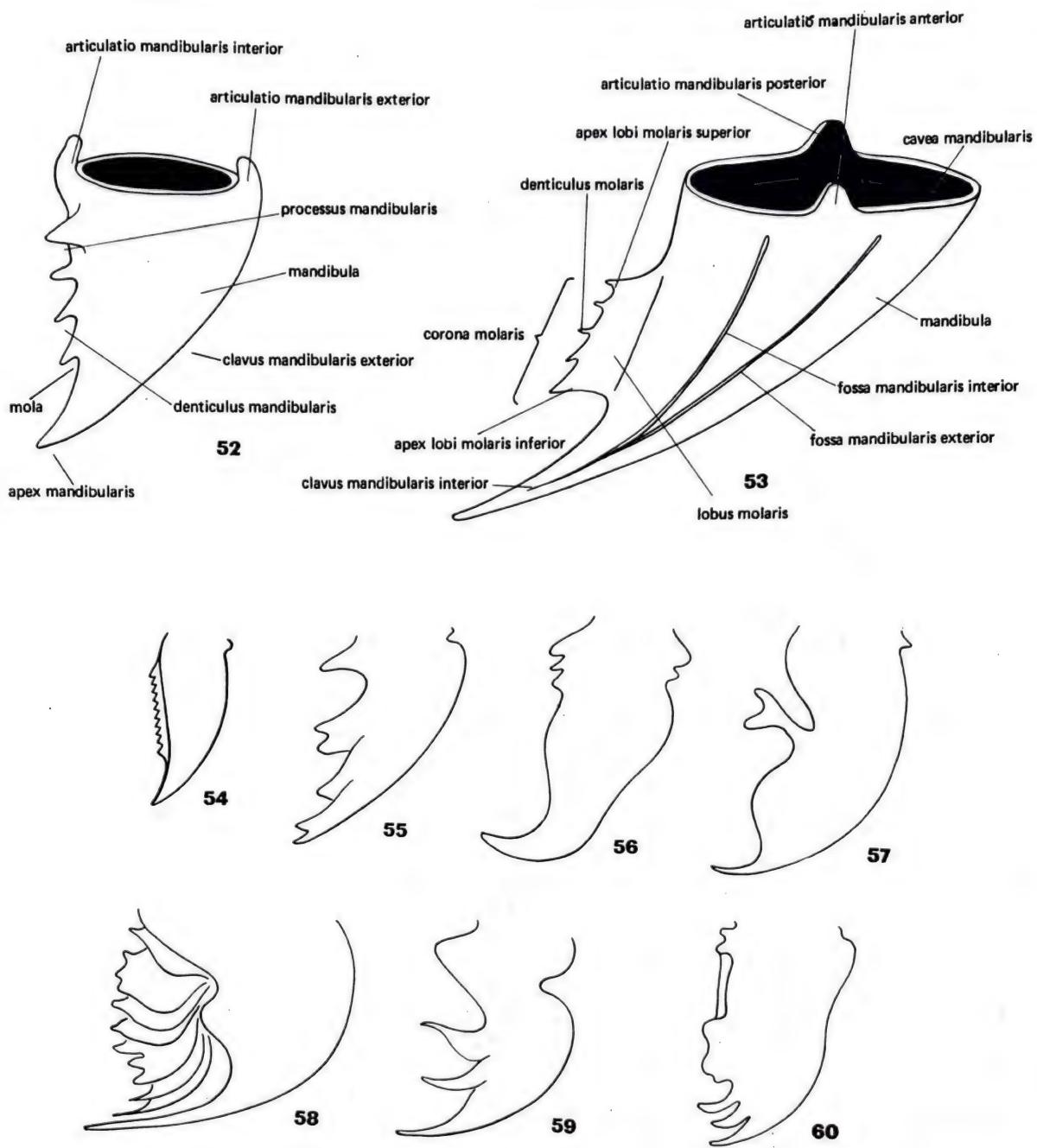
Figs. 38–43. Schematic drawing of 38–39: the frons, 40–41: the clypeus, and 42–43: the labrum



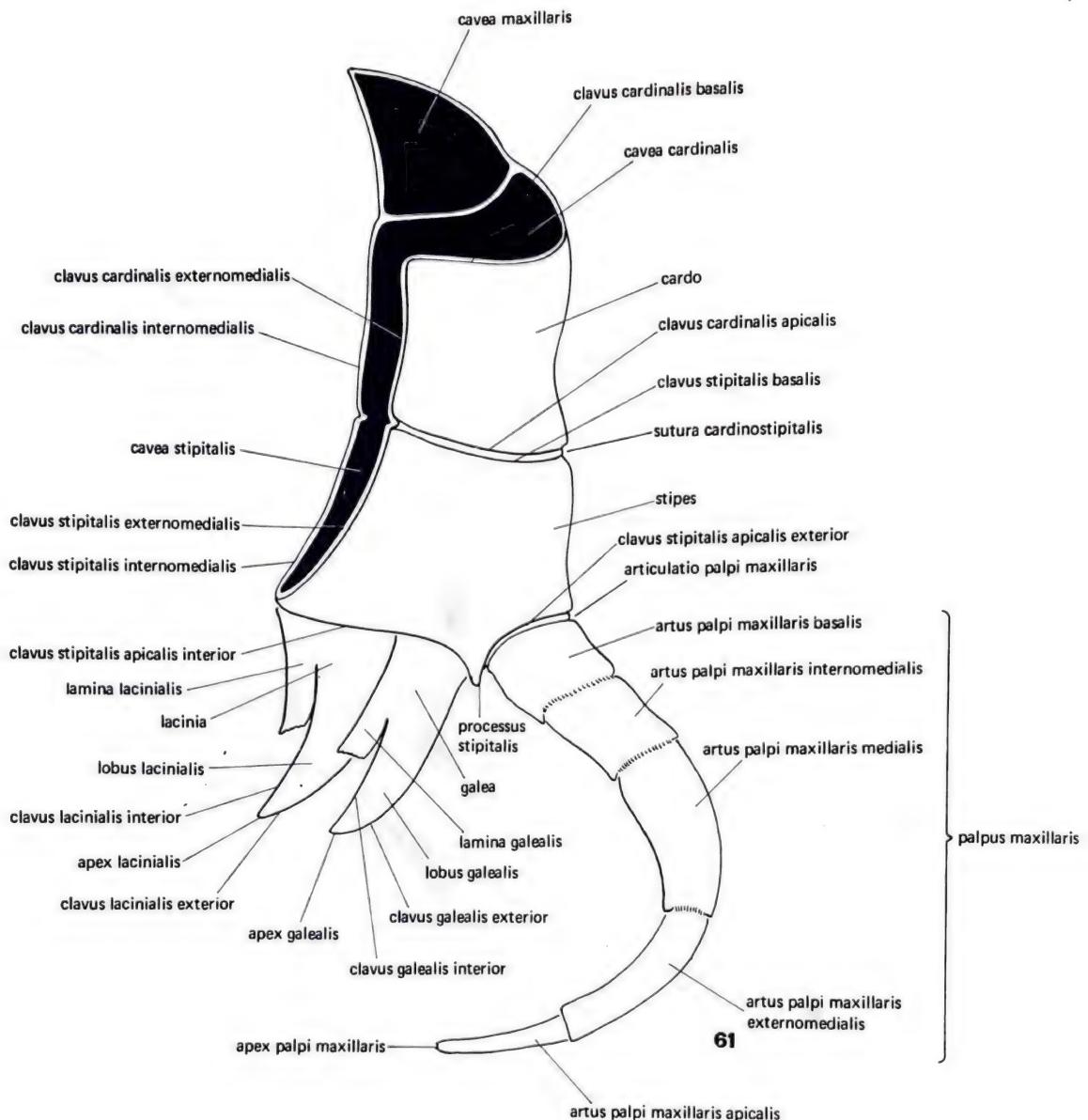
Figs. 44–47. Schematic drawing of 44–45: the frontoclypeus, and 46–47: the clypeolabrum

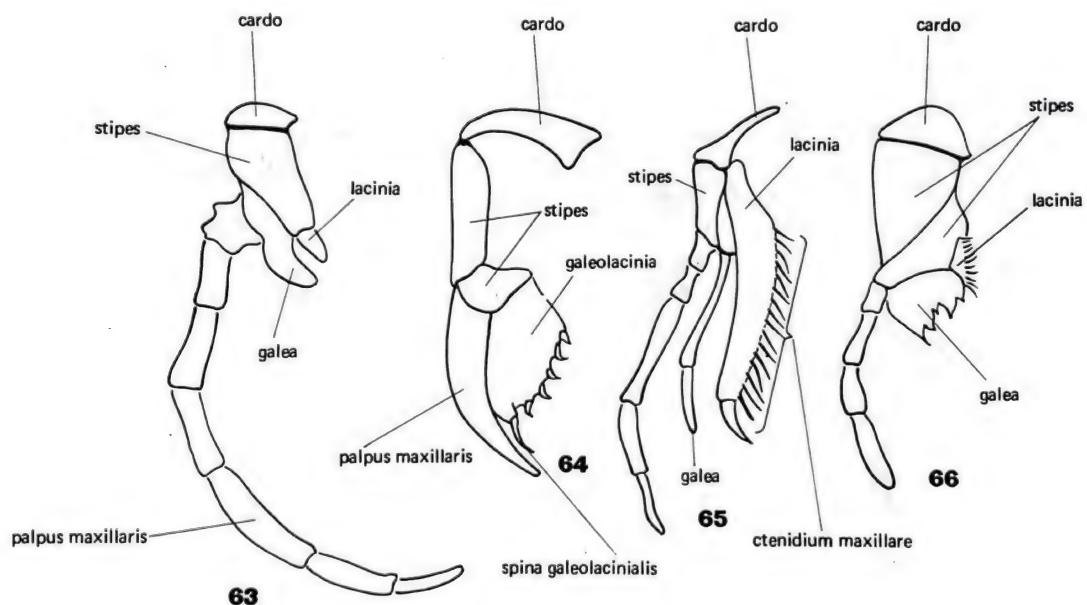
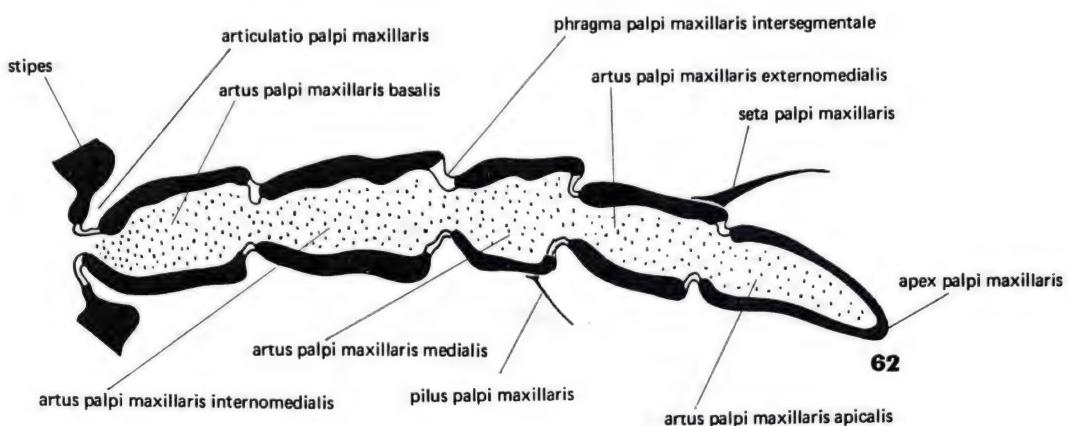


Figs. 48–51. Schematic drawing of 48–49: the gula, 50: the gena, and 51: the pleurostoma

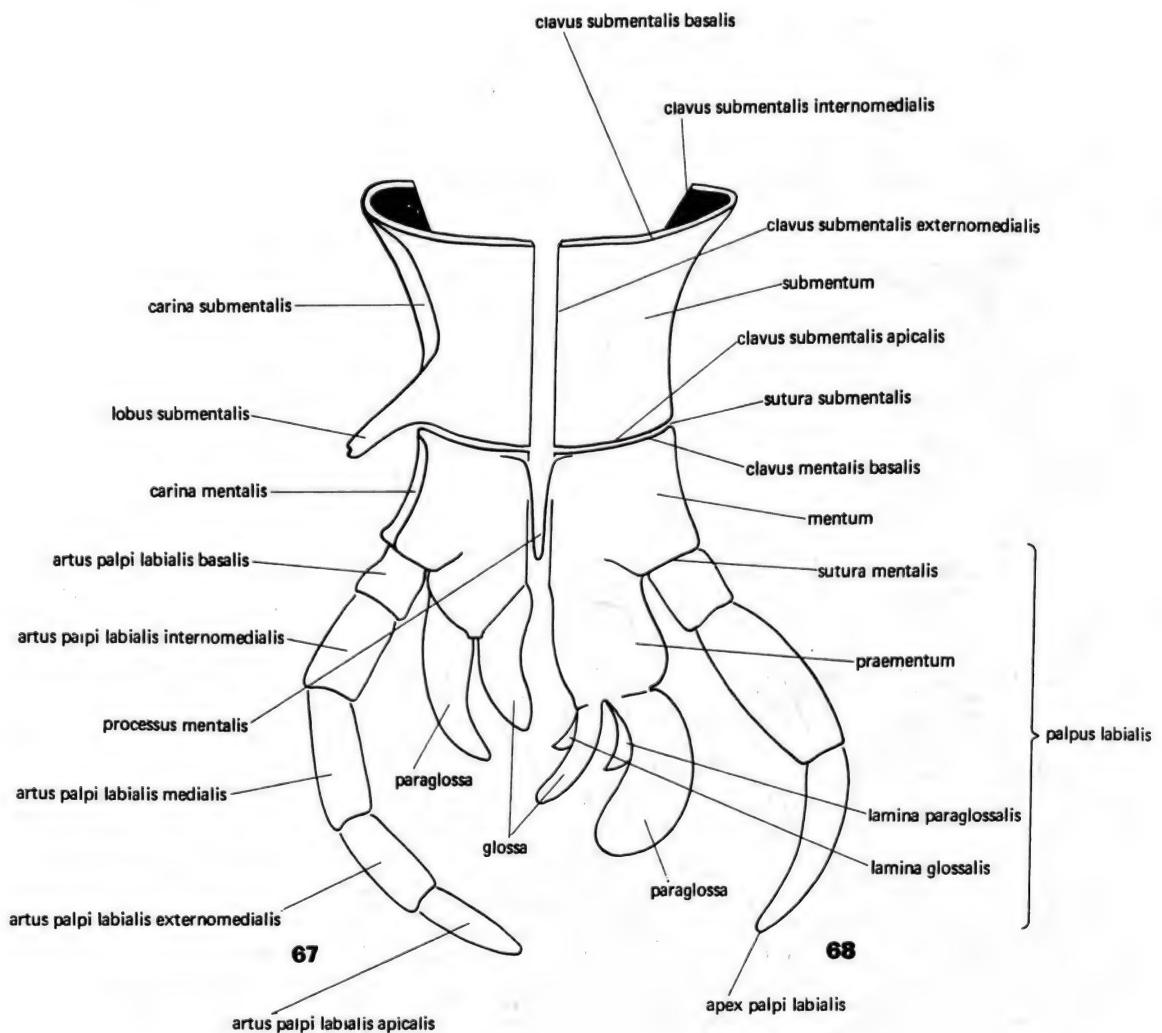


Figs. 52–60. The mandible (mandibula). — 52–53: The two main types of mandibular articulation. 54–60: Principal types of the mandible, 54: *Heliocoris* (Coleopt.), 55–56: Orthoptera, 57: *Anax* (Odon.), 58: *Acrydium* (Orthopt.), 59: *Hydrous* (Coleopt.), and 60: *Periplaneta* (Blatt.) (after Shvanvich 54–60)

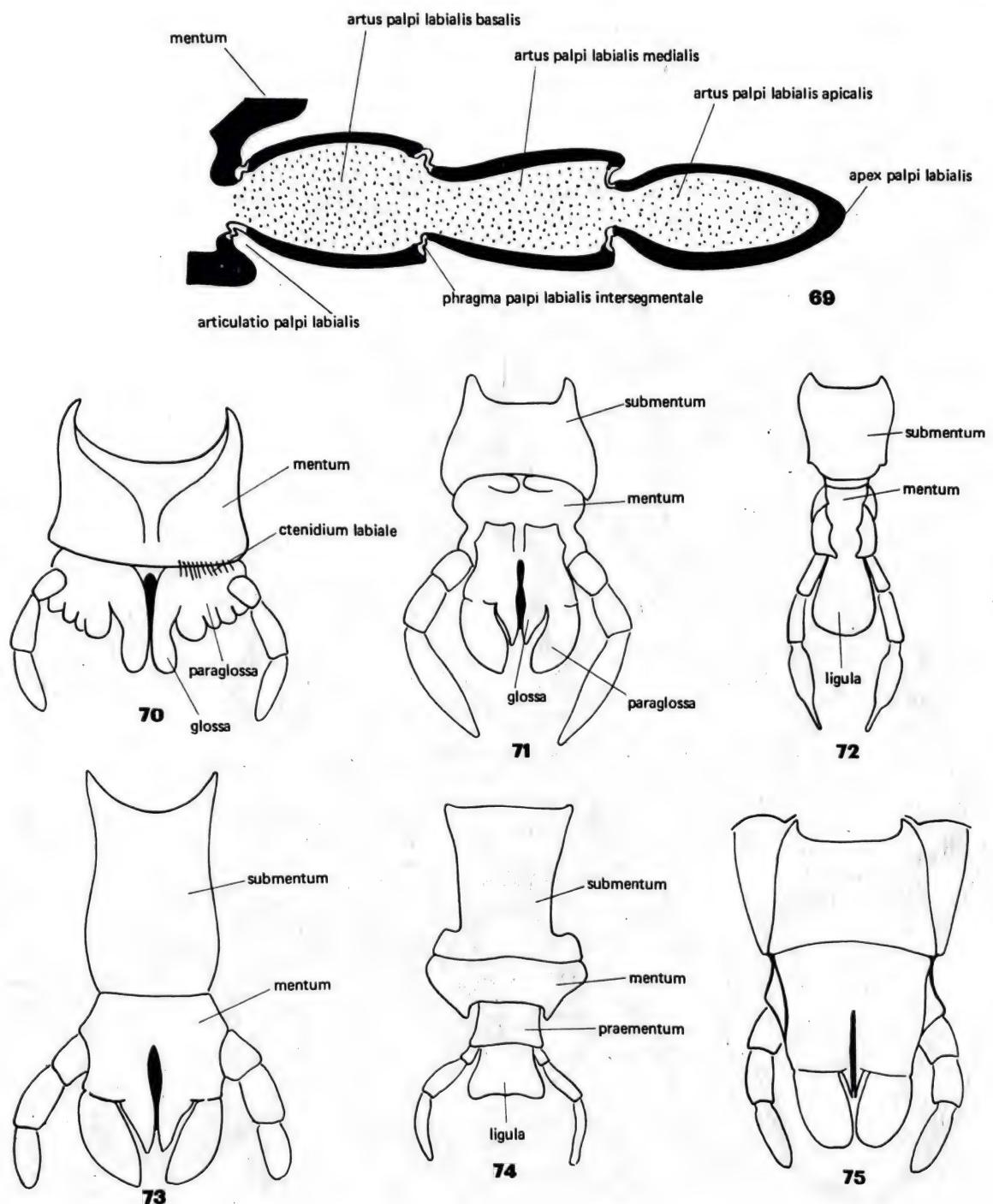




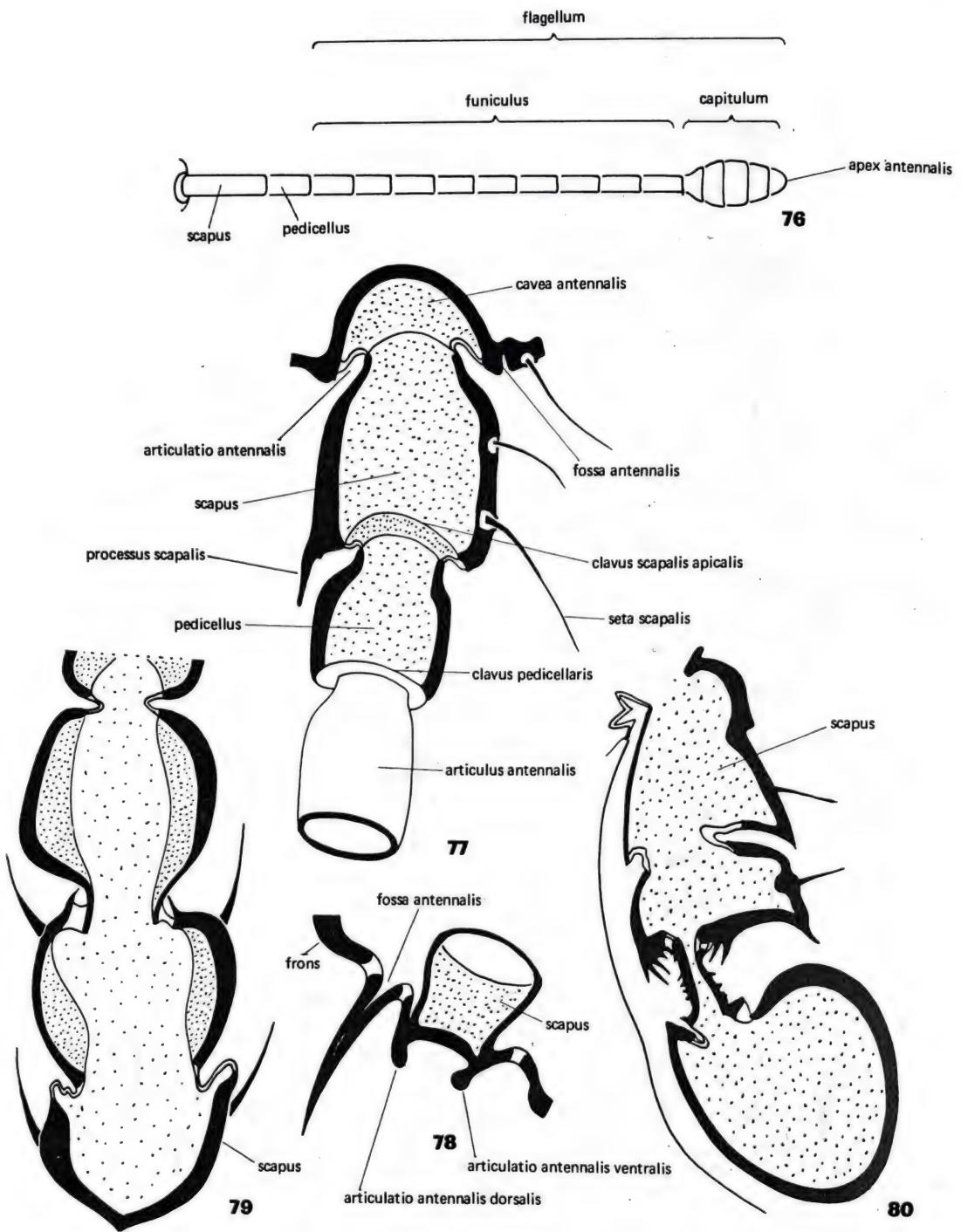
Figs. 62–66. The maxillary palp (palpus maxillaris) and the principal types of the maxilla. – 62: The maxillary palp, 63: Machilis (Diplura), 64: Aeshna (Odon.), 65: Cicindella (Coleopt.), and 66: Melolontha (Coleopt.) (after Wenk 62, and Weber 63–66)



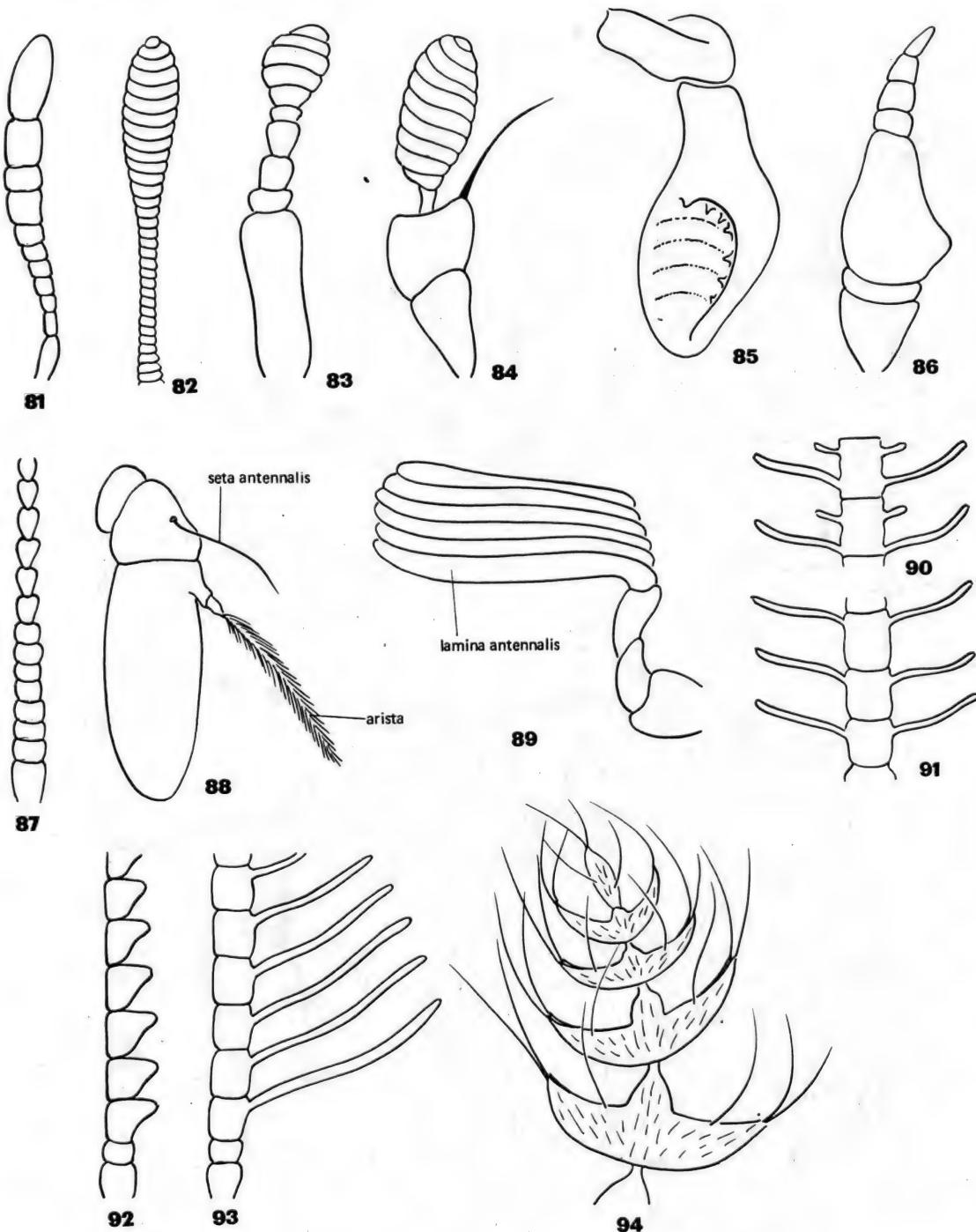
Figs. 67–68. The labium. — 67: Schematic drawing of a five-jointed, and 68: a three-jointed palp



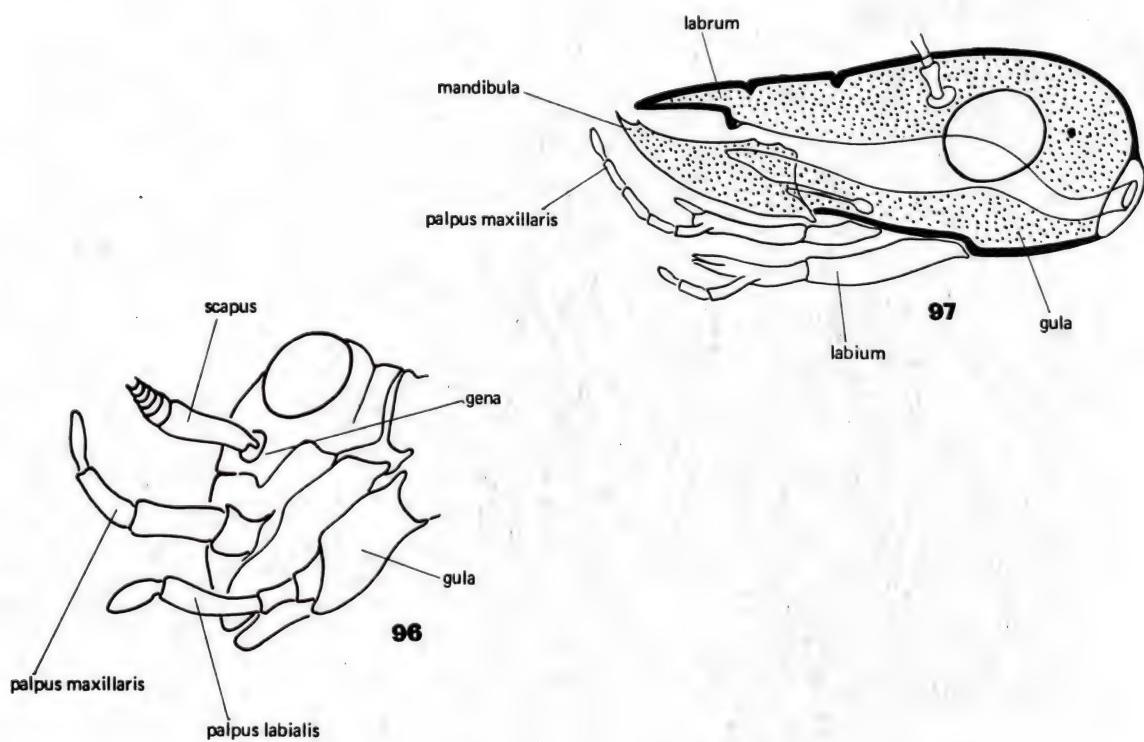
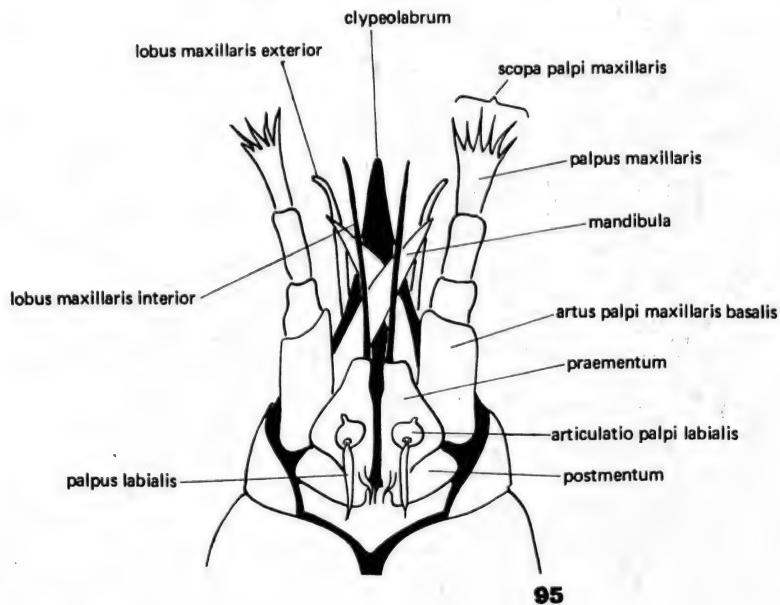
Figs. 69–75. The labial palp (*palpus labialis*) and the principal types of the labium. — 69: The labial palp, 70: *Machilis* (Diplura), 71: *Periplaneta* (Blatt.), 72: *Wesmaelius* (Neuropt.), 73: *Termopsis* (Isopt.), 74: Coleoptera, and 75: Embioptera (after Shvanvich)



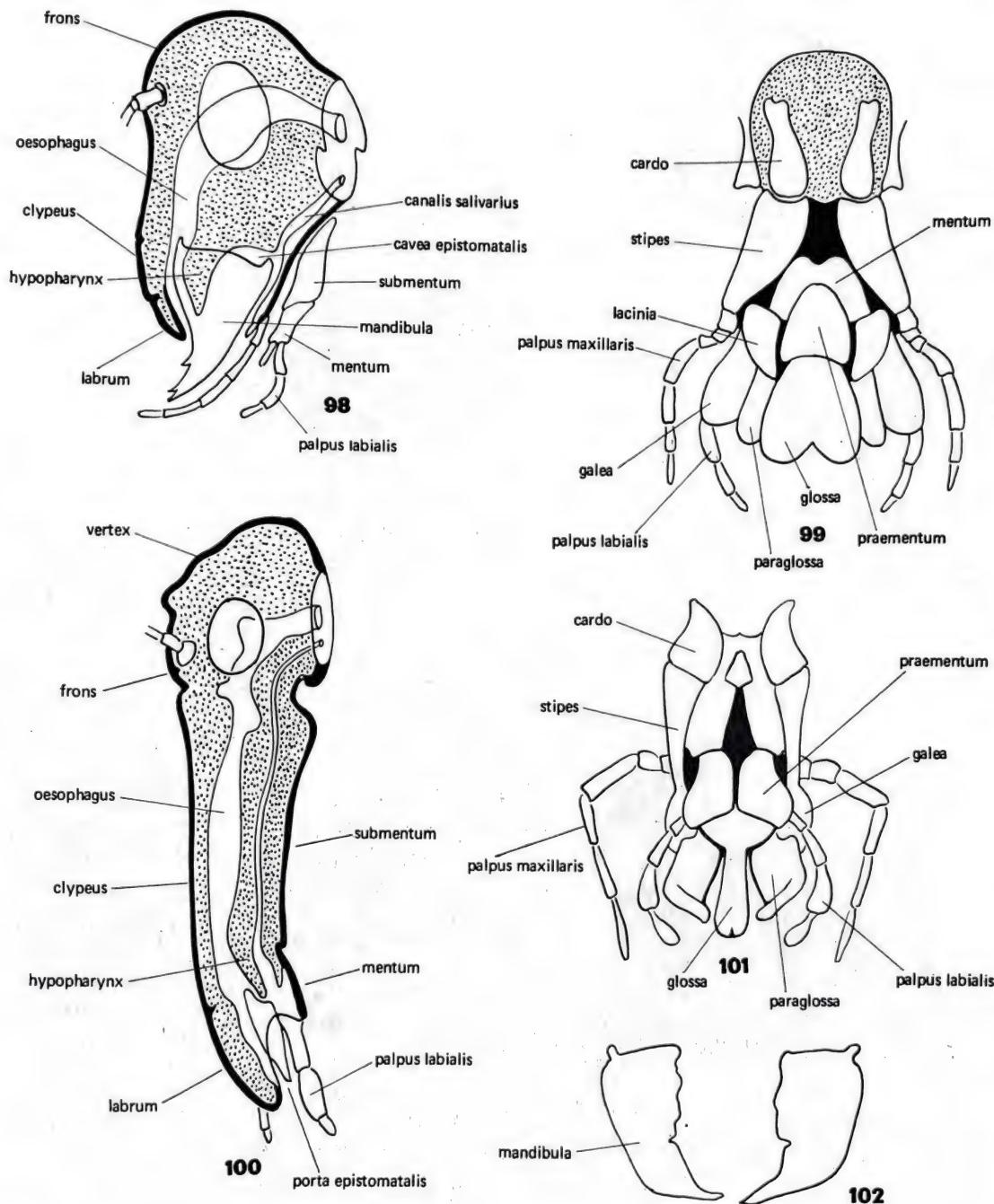
Figs. 76–80. The antenna and its parts. — 76: Schematic drawing of the antenna, 77: the scape (scapus) and the pedicel (pedicellus). 78: The articulation of the antenna. 79–80: The upright and the pendulous type of antenna (after Shvanvich 78, and Buckup 79–80)



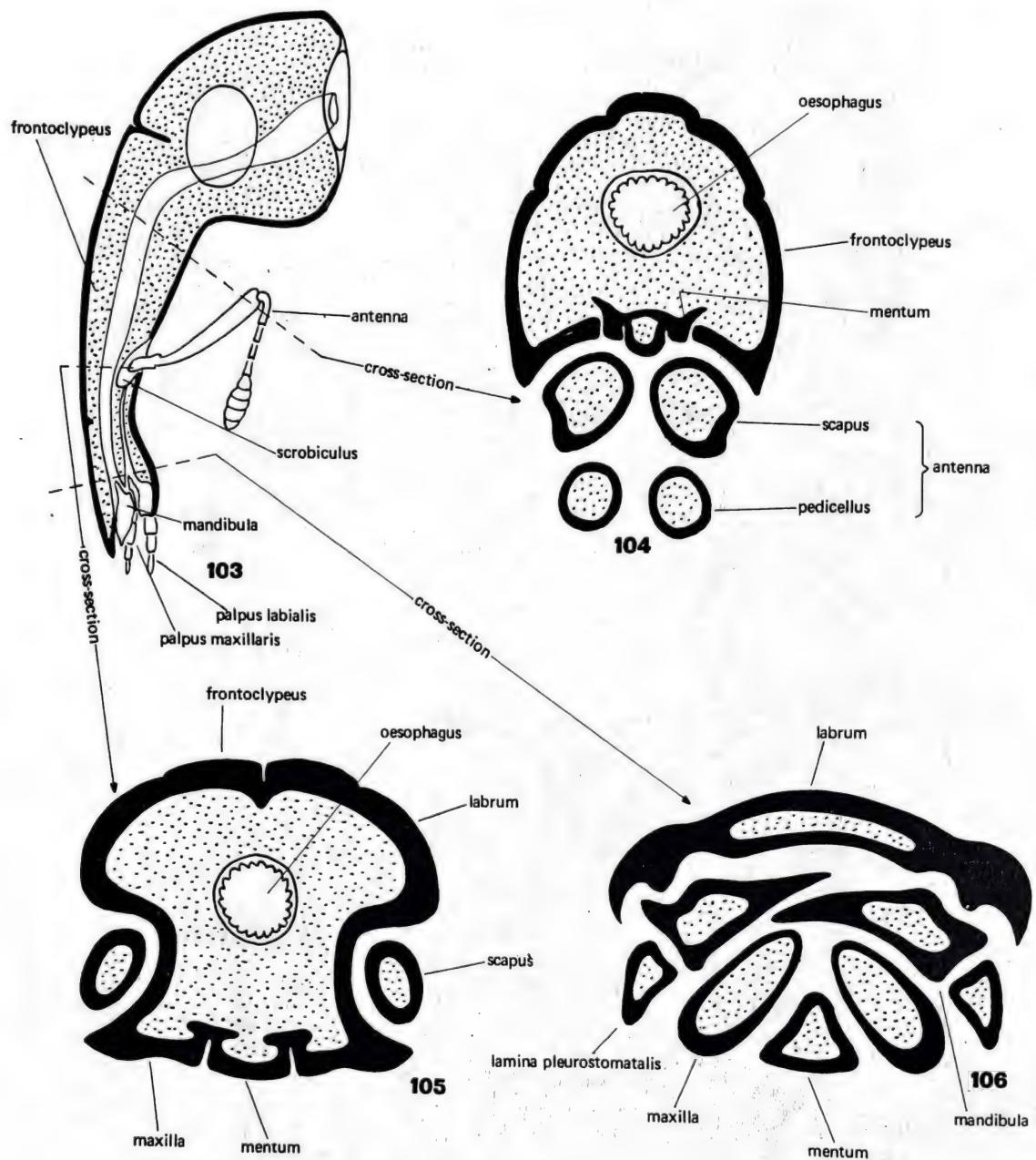
Figs. 81–94. Characteristic types of the antenna. — 81: Abbreviate antenna (*a. abbreviata*).  
 82: incrassate (*a. incrassata*), 83: clavate (*a. clavata*), 84: spathulate (*a. spathulata*), 85: laminate  
 (*a. laminata*), 86: mucronate (*a. mucronata*), 87: attenuate (*a. attenuata*), 88: setigerous (*a. setigera*),  
 89: lamellate (*a. lamellata*), 90: alternately pinnate (*a. insequaliter pinnata*), 91: plumose (*a. plumata*),  
 92: imbricate (*a. imbricata*), 93: pectinate (*a. pectinata*), and 94: fusiform (*a. fusiformis*) (after Daday).



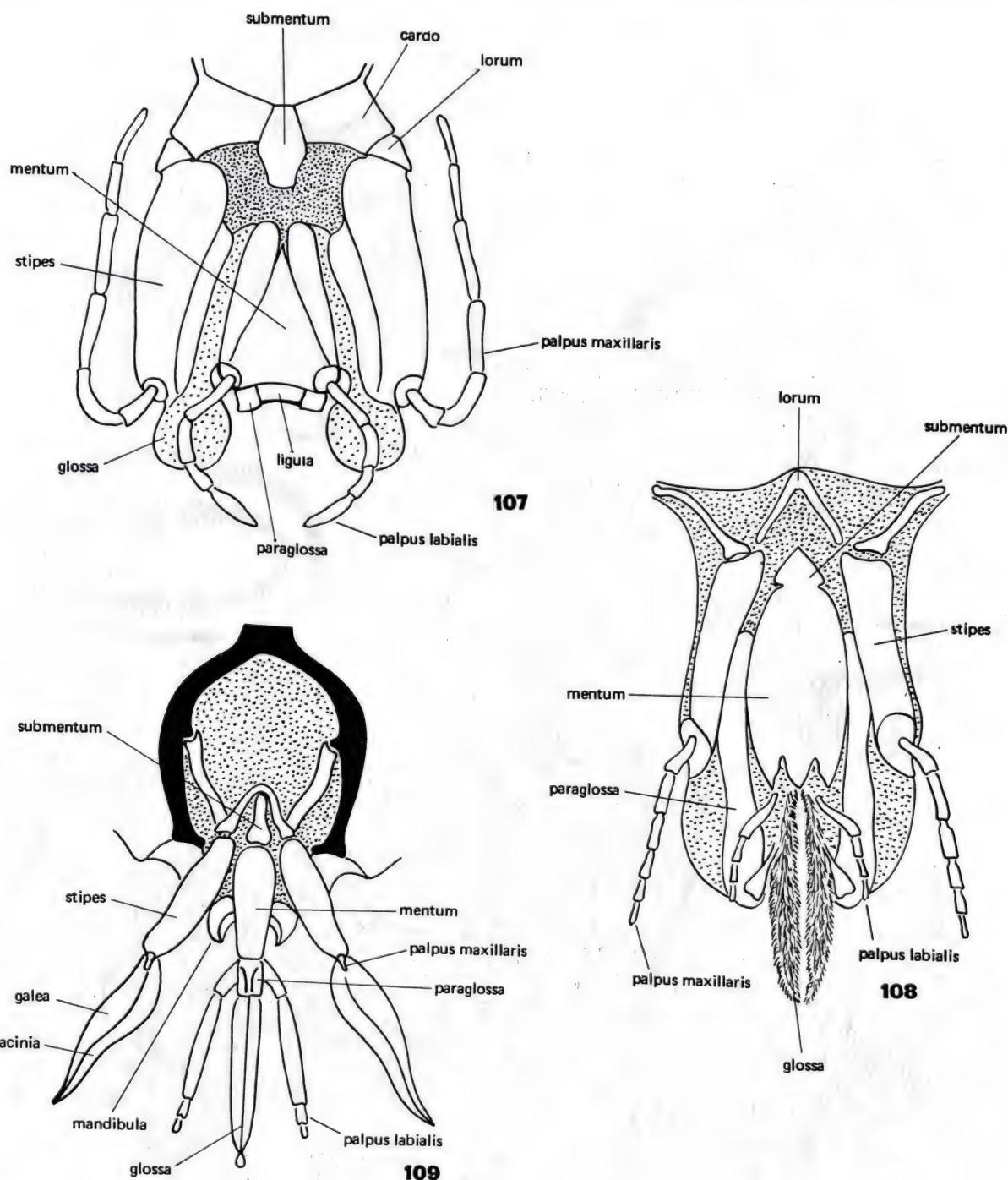
**Figs. 95–97.** Principal types of the insect head. — 95: Entognath, 96: hypognath, and 97: prognath (after Matsuda 95, Shvanvich 96, Steinmann 97)



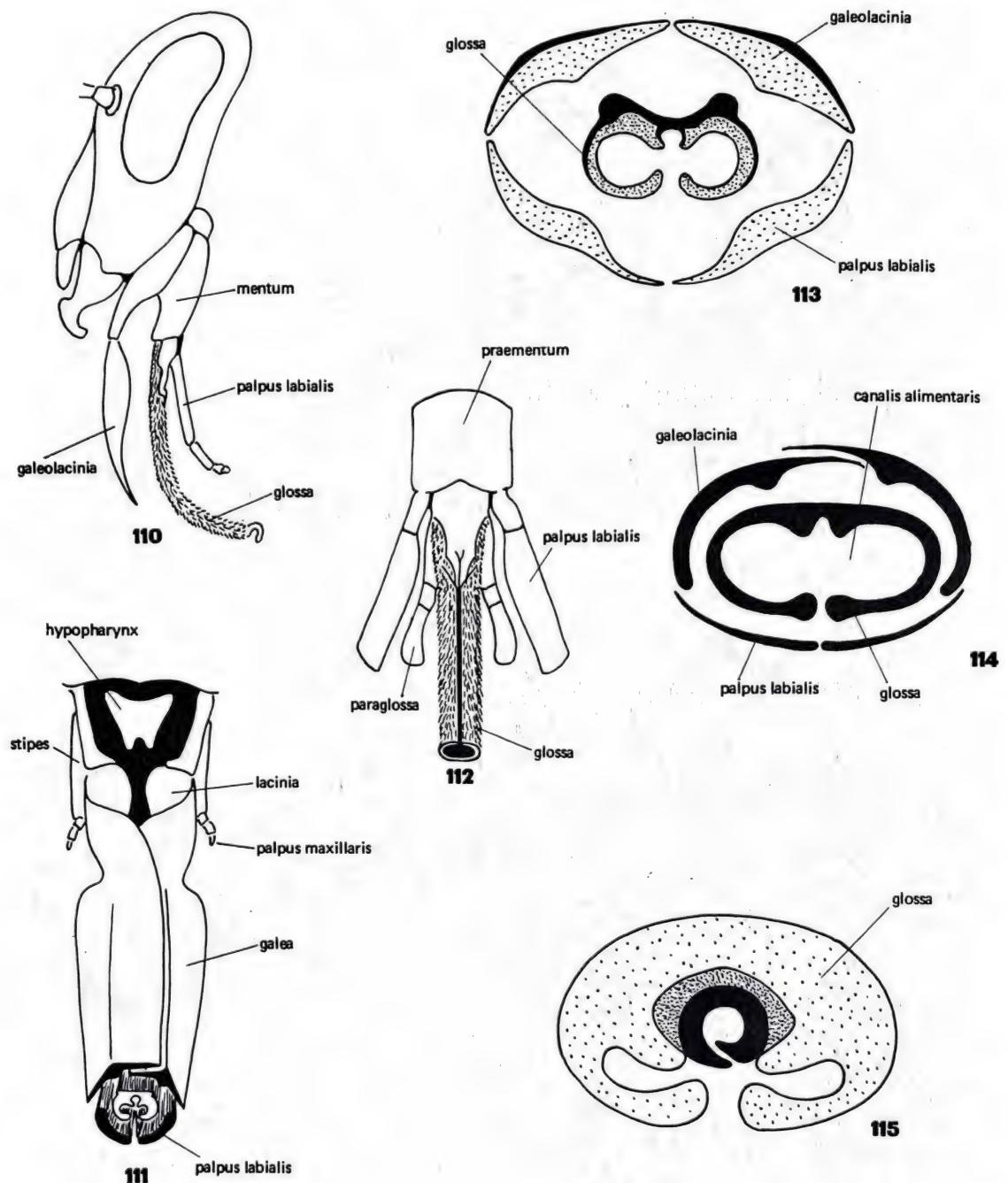
Figs. 98–102. Orthognath types of the insect head and mouthparts with mandibles. — 98: Normal orthognath, and 100: elongated orthognath forms. 99: Simple mouthparts, and 101: more advanced mouthparts, and 102: pair of mandible (after Snodgrass 99, 101–102)



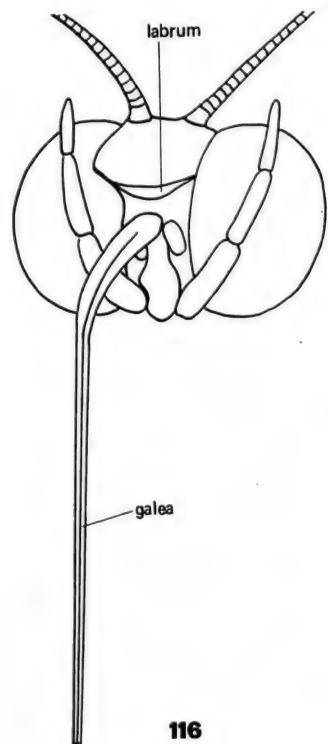
Figs. 103–106. Curculionid (Coleopt.) rostrum in three cross-sections. — 103: Longitudinal section, 104: basal cross-section, 105: medial cross-section, and 106: cross-section before buccal cavity (after Dönges)



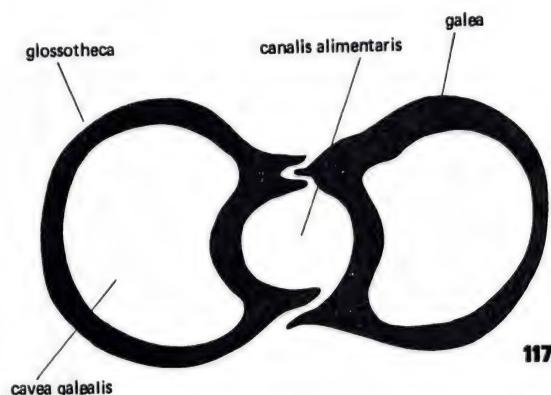
Figs. 107–109. Three types of mouthparts of Hymenoptera. — 107: Biting mouthparts of the Sphecid-type, 108: transitional form between the biting and licking mouthparts of the Andrena-type, and 109: normal licking mouthparts of the Apis-type (after Snodgrass)



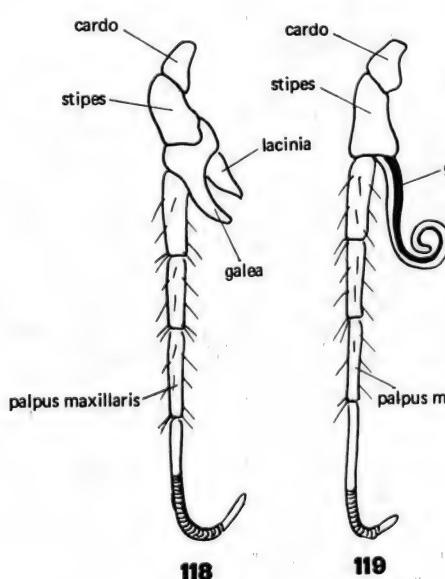
Figs. 110–115. Mouthparts of the licking type. — 110: Head of *Apis* (Hymenopt.) in lateral view, 111: proboscis with galea, 112: modified glossa in lateral view, 113: Proboscis in basal cross-section, 114: schematic proboscis in cross-section, and 115: proboscis in apical cross-section (after Shvanvich 111–115)



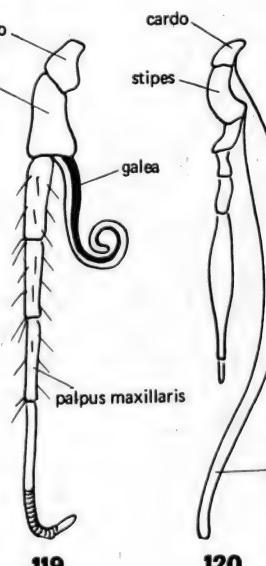
116



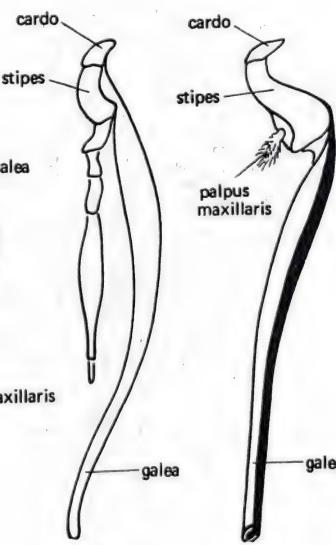
117



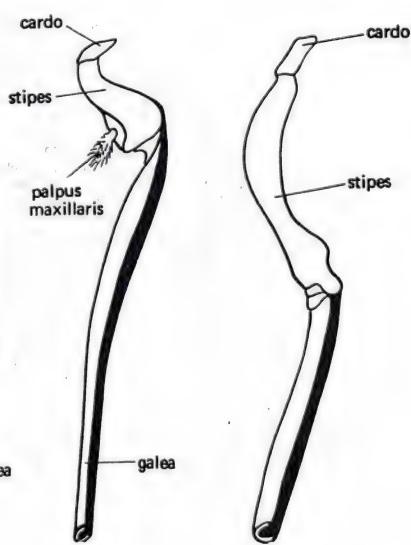
118



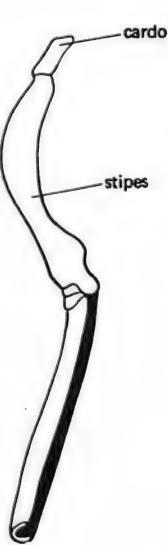
119



120

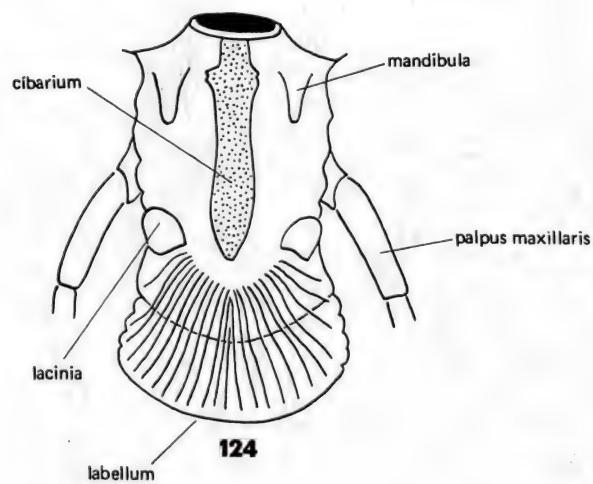
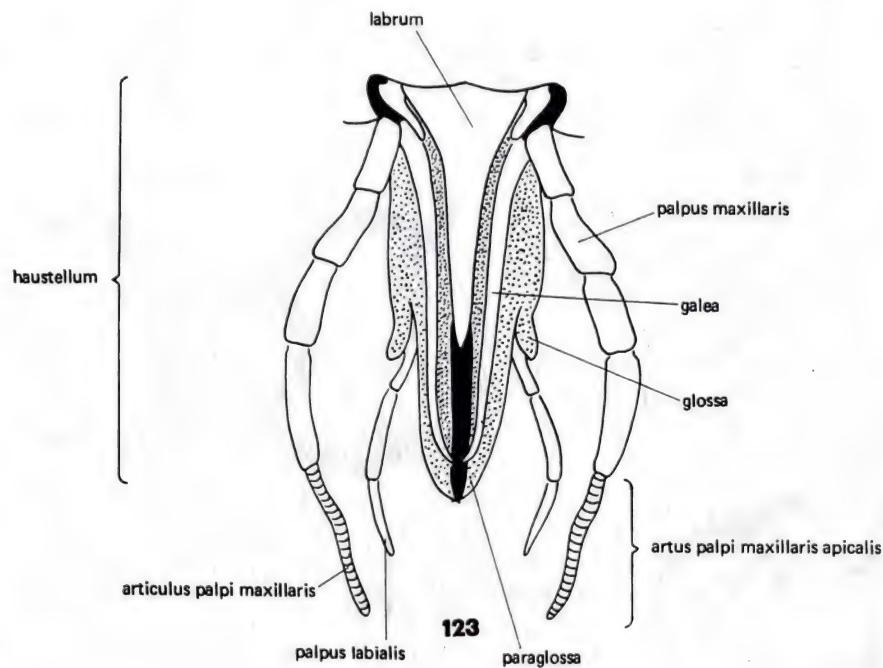


121

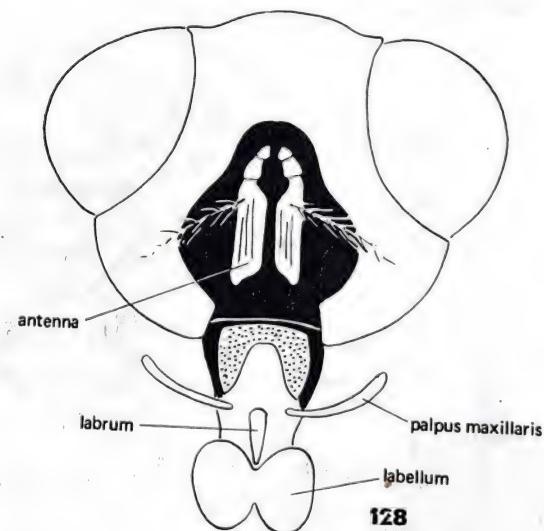
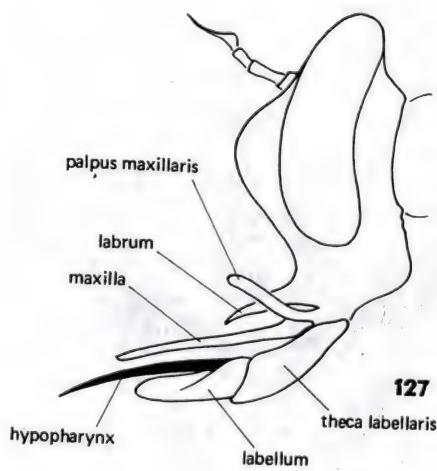
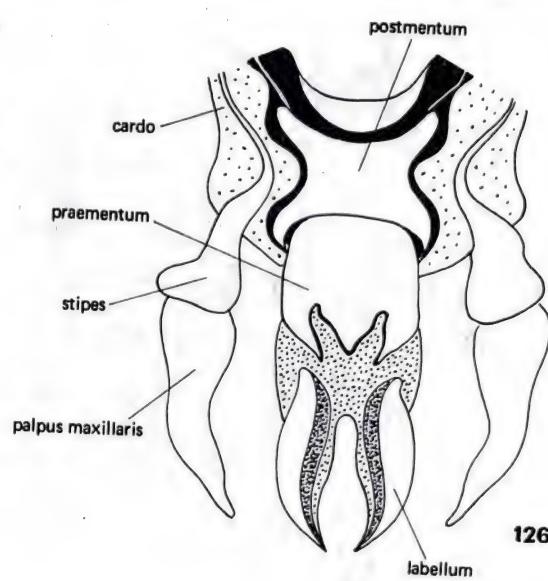
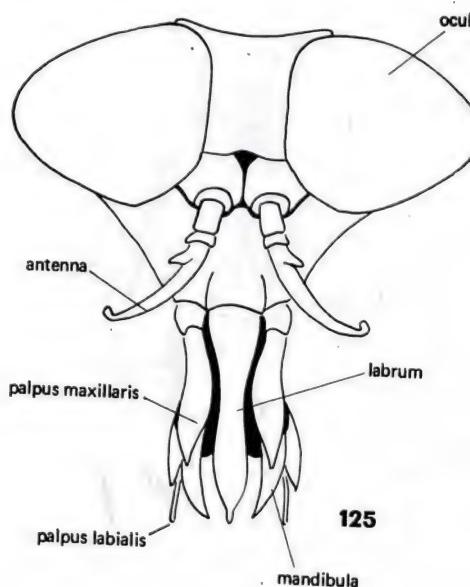


122

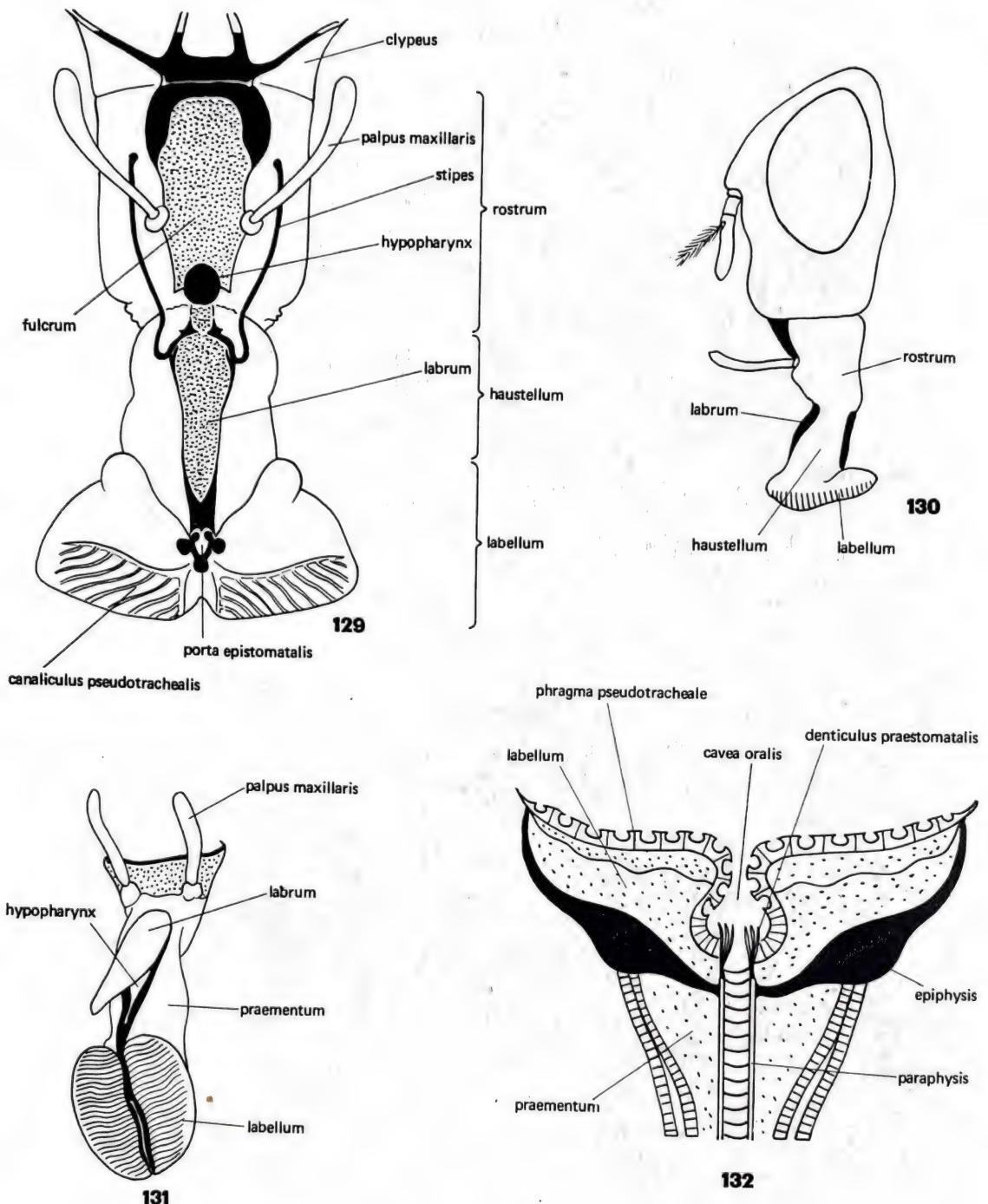
Figs. 116–122. Mouthparts of the sucking type of Lepidoptera. — 116: Head with coiled proboscis (*lingua spiralis*), 117: schematic proboscis in cross-section (*instrumenta suctoria*). 118–122: Modified galea, 118: *Micropteryx*-type, 119: *Mneomonica*-type, 120: *Pronuba*-type, 121: *Synanthedon*-type, and 122: *Sphinx*-type (after Burgess 117, and Shvanovich 118–122)



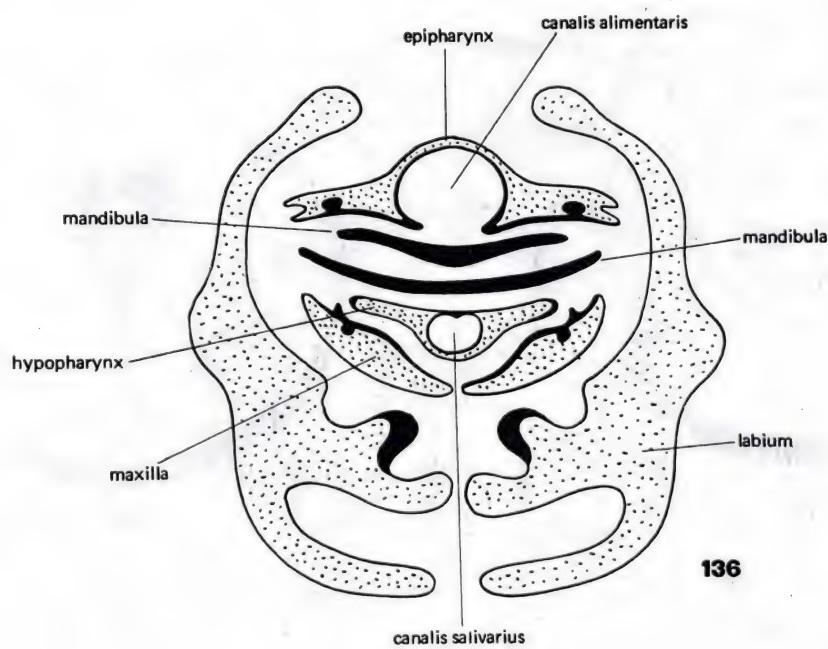
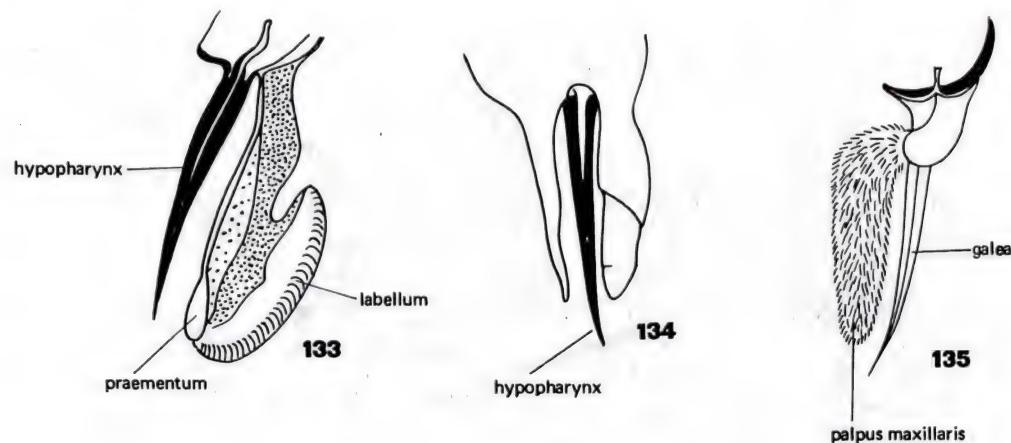
Figs. 123–124. Mouthparts of the sucking type of Trichoptera. — 123: Ventral aspect of proboscis of *Phryganea*-type, and 124: same in dorsal aspect (after Chrichton)



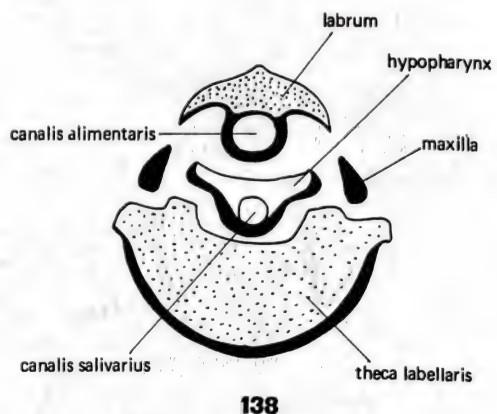
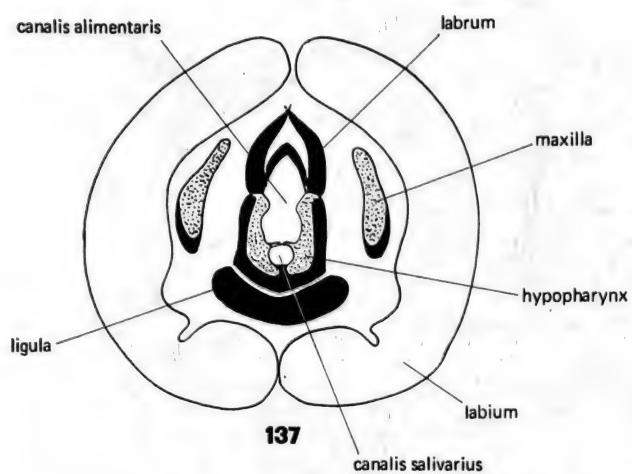
Figs. 125–128. Mouthparts of the piercing-sucking type with labellum. — 125: *Tabanus* head (Dipt.) in frontal view. 126: Mouthparts of the *Tabanus*-type in ventral view, 127: *Asilus* (Dipt.) head in lateral view, and 128: *Schizophora* (Dipt.) head in frontal view (after Snodgrass 125–126, Matsuda 127, and Shvanvich 128)



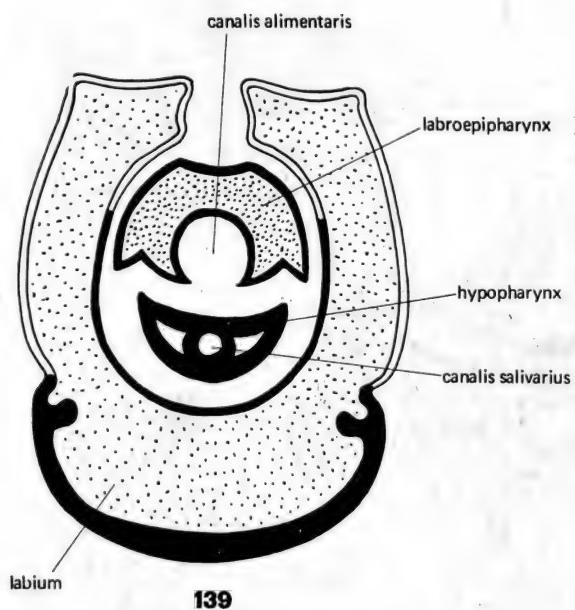
Figs. 129–132. Mouthparts of the piercing-sucking type with labellum. — 129: Proboscis of the Musca-type (Dipt.) in posterior view, 130: same in lateral view, 131: proboscis of the Musca-type in ventro-lateral view, and 132: the labellum in longitudinal section (after Snodgrass 129, 131, and Matsuda 132)



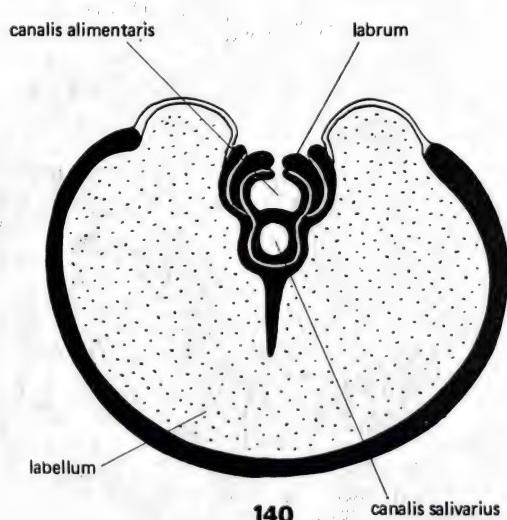
Figs. 133–136. Mouthparts of the piercing-sucking type with labellum. — 133: Hypopharynx of the Tabanus-type (Dipt.), 134: same of the Asilus-type (Dipt.), 135: galea of the Tabanus-type, and 136: cross-section of proboscis of the Tabanus-type (after Snodgrass 133, 135, and Shvanvich 134, 136).



138



139

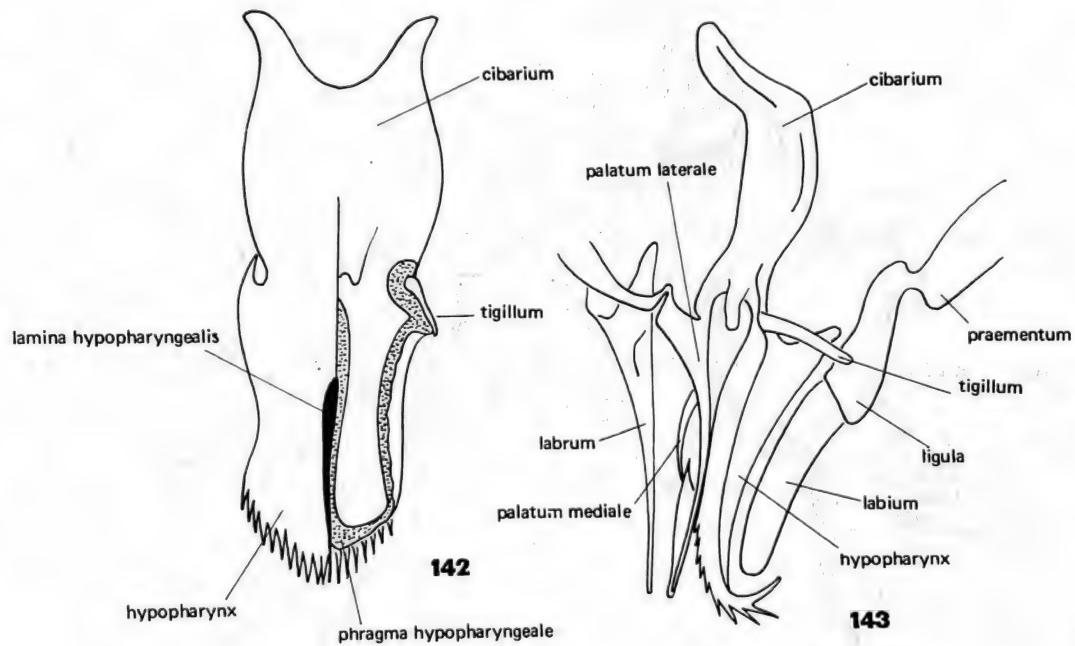


140

Figs. 137–140. Mouthparts of the piercing-sucking type with labellum in cross-section. — 137: Proboscis of the Machimus-type (Dipt.), 138: same of the Pangonia-type (Dipt.), 139: same of the Musca-type (Dipt.), and 140: typical labellum of a Diptera (after Matsuda 137, Kéler 138, and Weber 139)



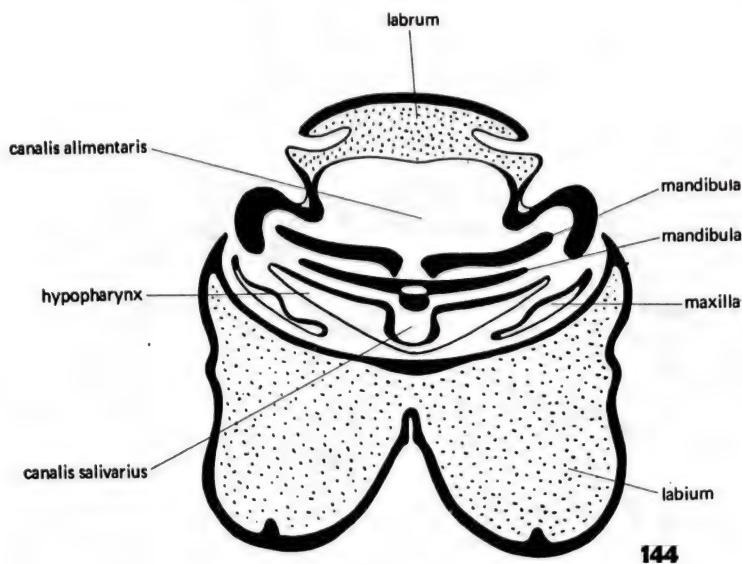
141



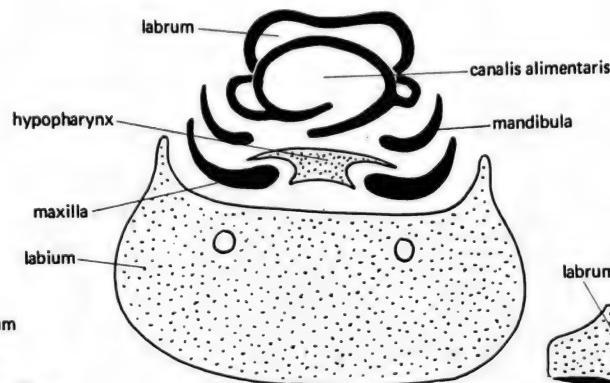
142

143

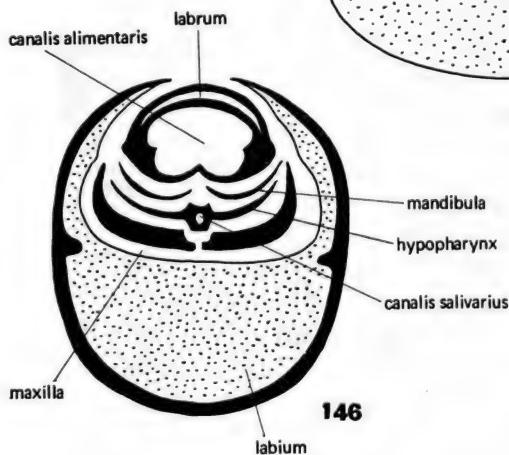
Figs. 141–143. Mouthparts of the piercing-sucking type with five stylets. — 141: Head of a Nematocera (Dipt.) with separated mouthparts. 142–143: Hypopharynx of the Simulium-type (Dipt.), 142: in ventral view, and 143: in lateral view (after Shvanvich)



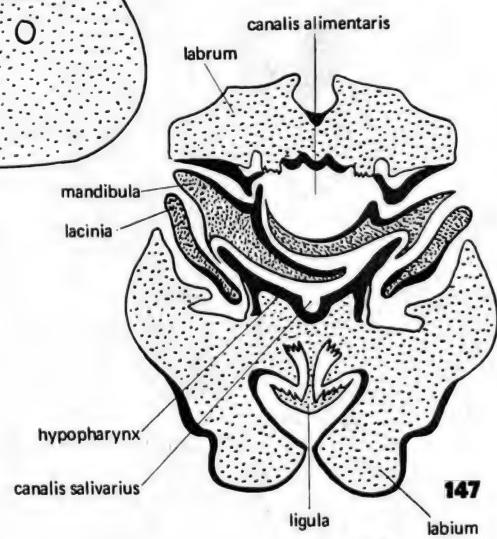
144



145

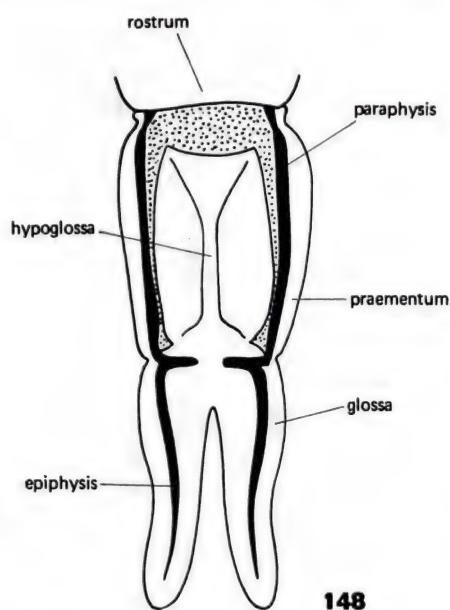


146

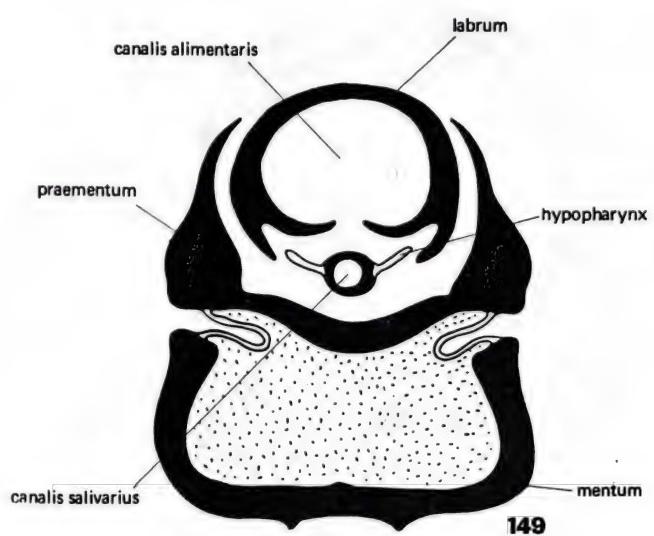


147

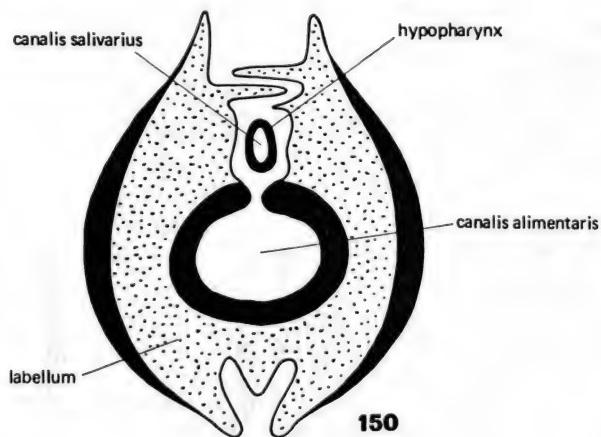
Figs. 144–147. Mouthparts of the piercing-sucking type with five stylets. — 144–145: Cross-section of proboscis of the Culicoides-type (Dipt.), 144: in basal portion, and 145: in apical portion, 146: Cross-section of proboscis of the 146: Anopheles-type (Dipt.), and 147: Simulium-type (Dipt.) (after Shvanvich 144, Kéler 145, Vogel 146, and Wenk 147)



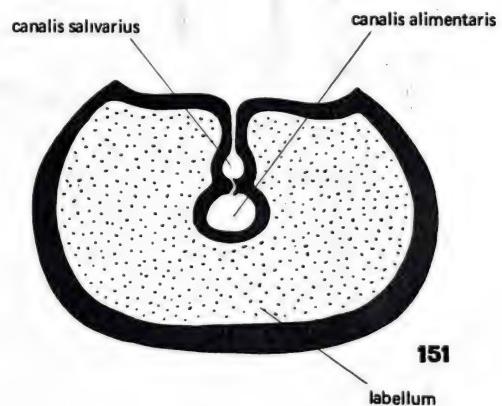
148



149

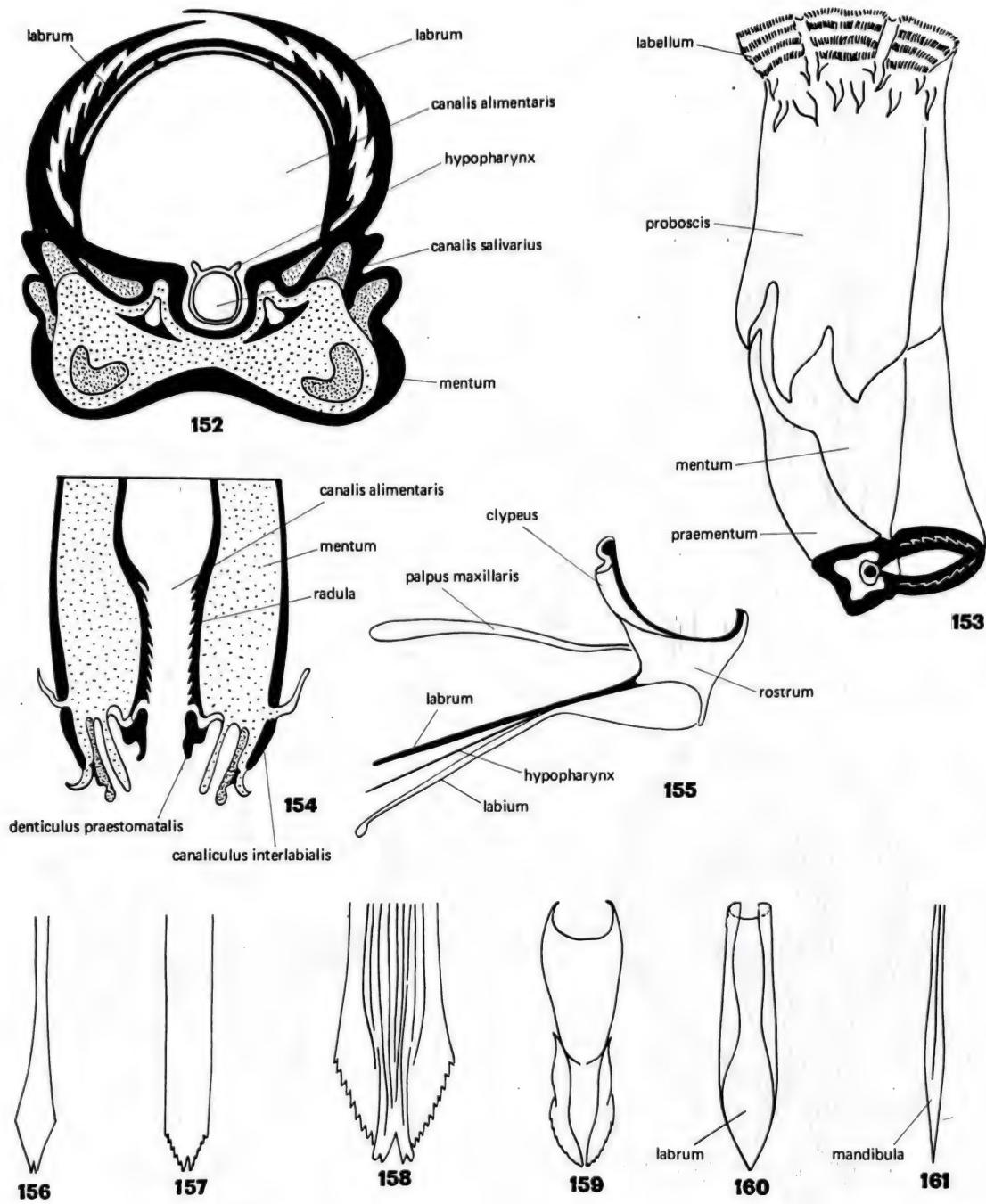


150

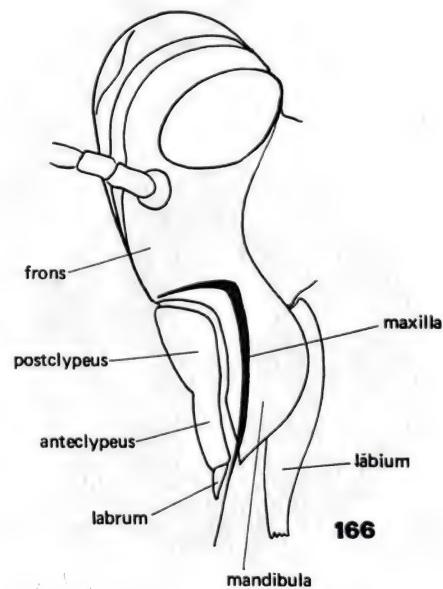
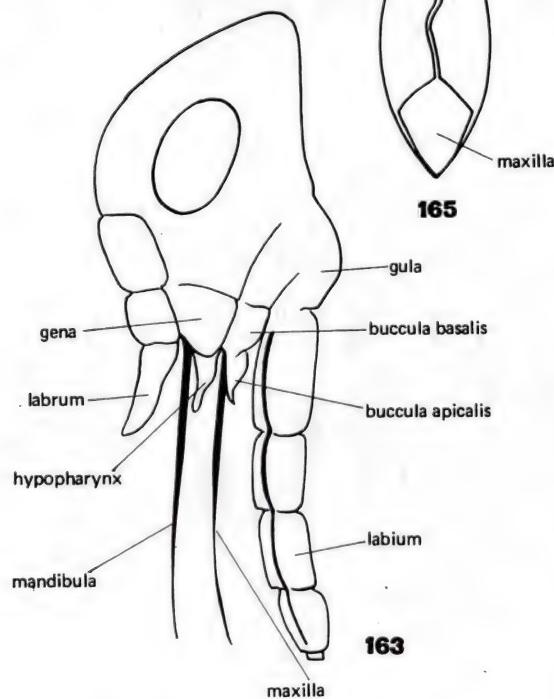
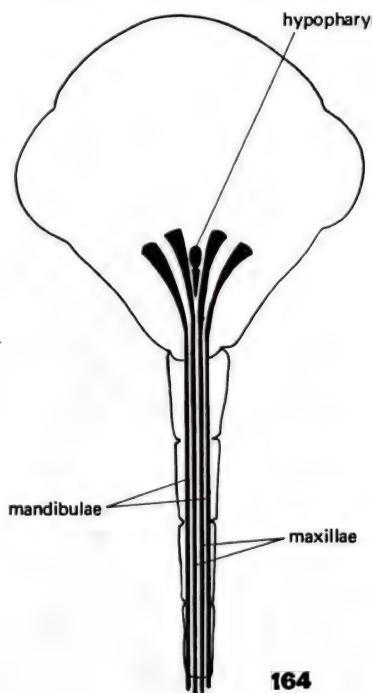
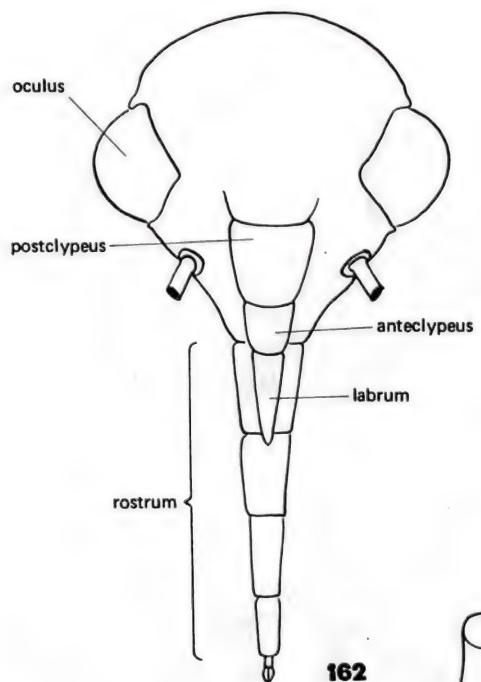


151

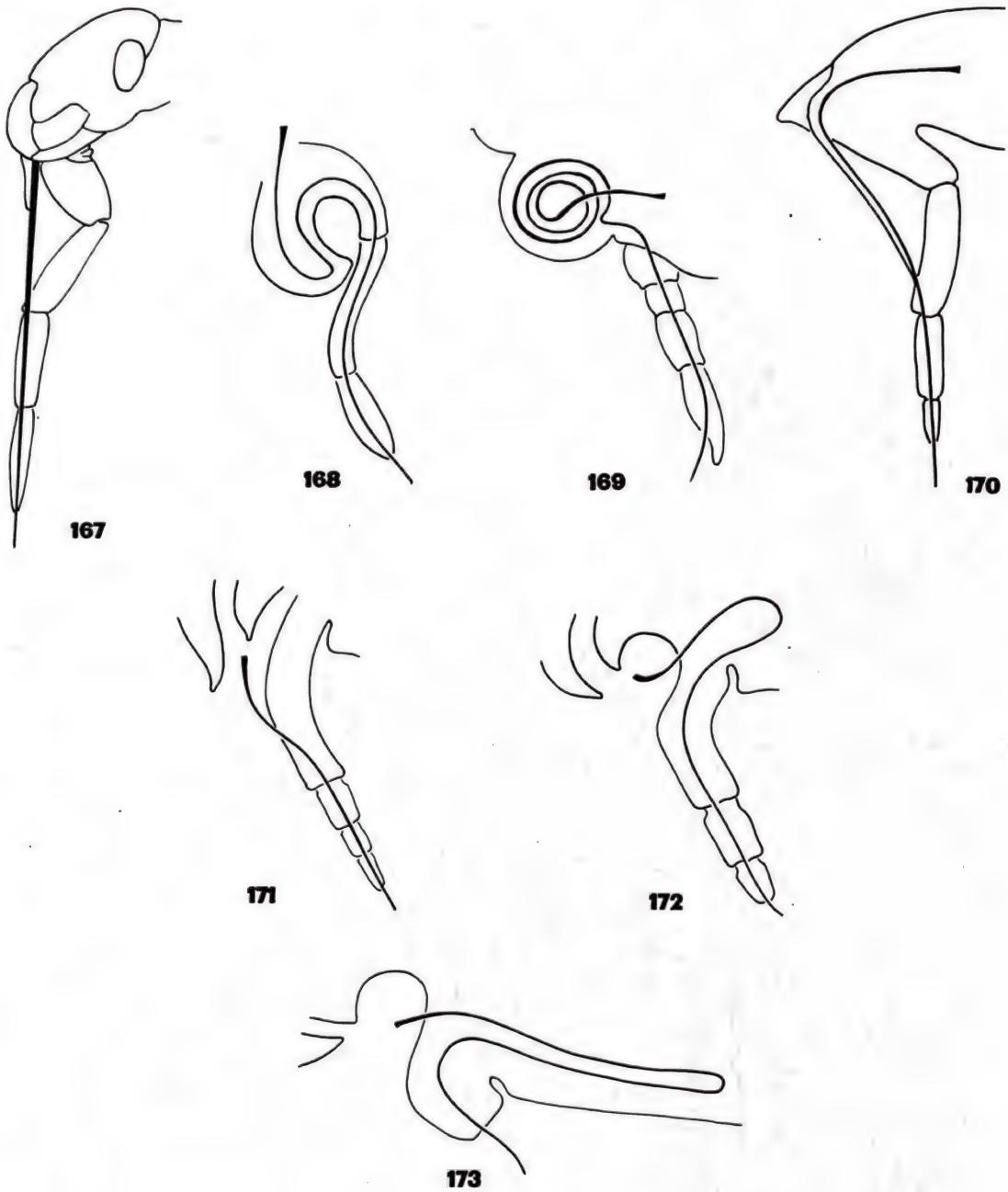
Figs. 148–151. Mouthparts of the piercing-sucking type with five stylets. — 148: Modified labium of a Calyptrata (Dipt.). 149: Cross-section of proboscis of the Lynchia-type (Dipt.). 150–151: Cross-section of labellum of the 150: Cyclopodia-type (Dipt.), and 151: Nycteribosca-type (Dipt.) (after Matsuda 148, and Shvanvich 149–151)



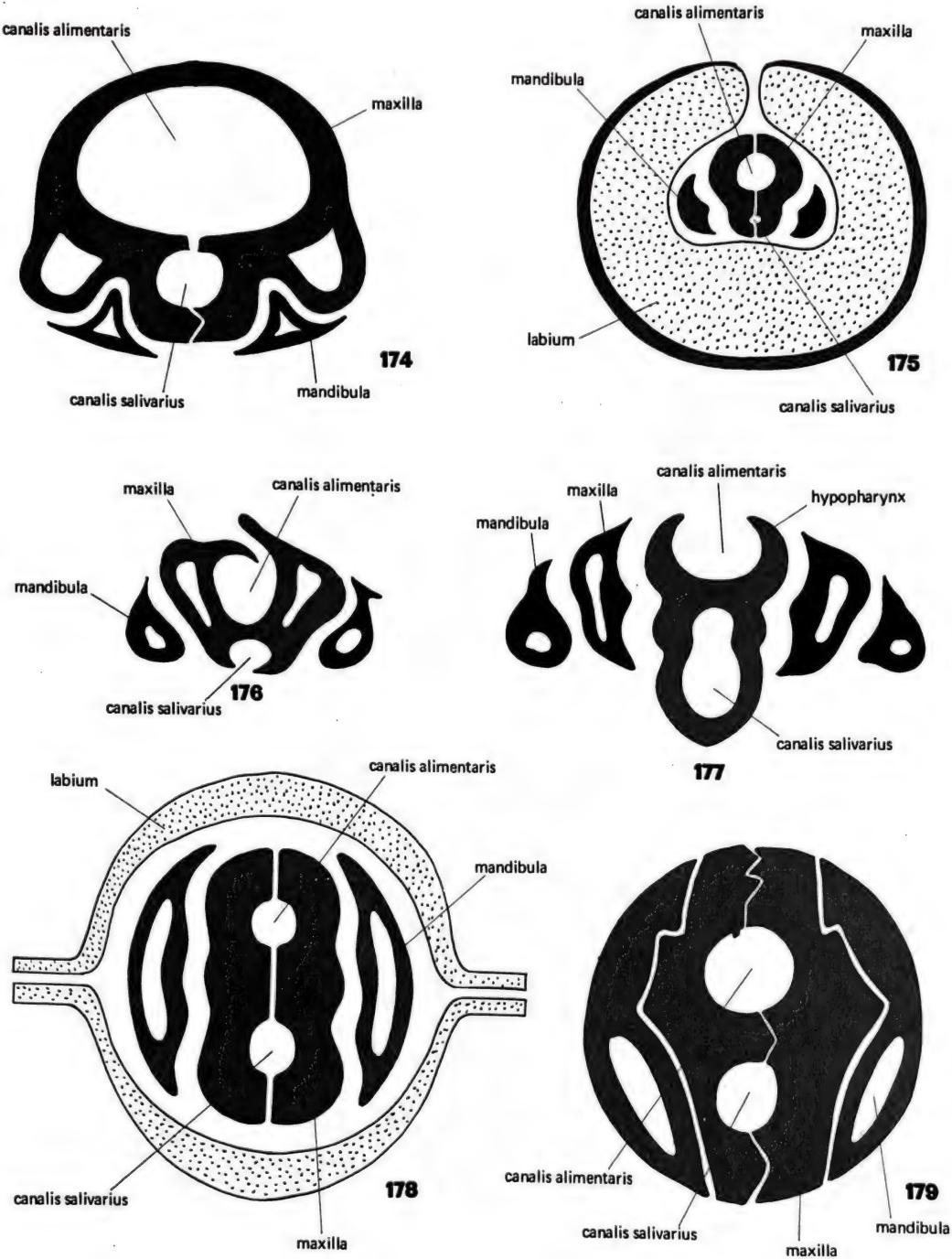
Figs. 152–161. Mouthparts of the piercing-sucking type with five stylets. — 152–155: Same of the Glossina-type (Dipt.). 152: cross-section of the proboscis, 153: apical portion of the proboscis, 154: apical portion of the proboscis in longitudinal section, and 155: piercing apparatus. 156–161: Apical portion of some styles, 156: Glossina-type, 157–158: Culicoides-type (Dipt.), 159: Simulium-type (Dipt.), 160: Anopheles-type (Dipt.), and 161: Psychoda-type (Dipt.) (after Vogel 152, Shvanvich 153–154, Snodgrass 155, and Matsuda 156–161).



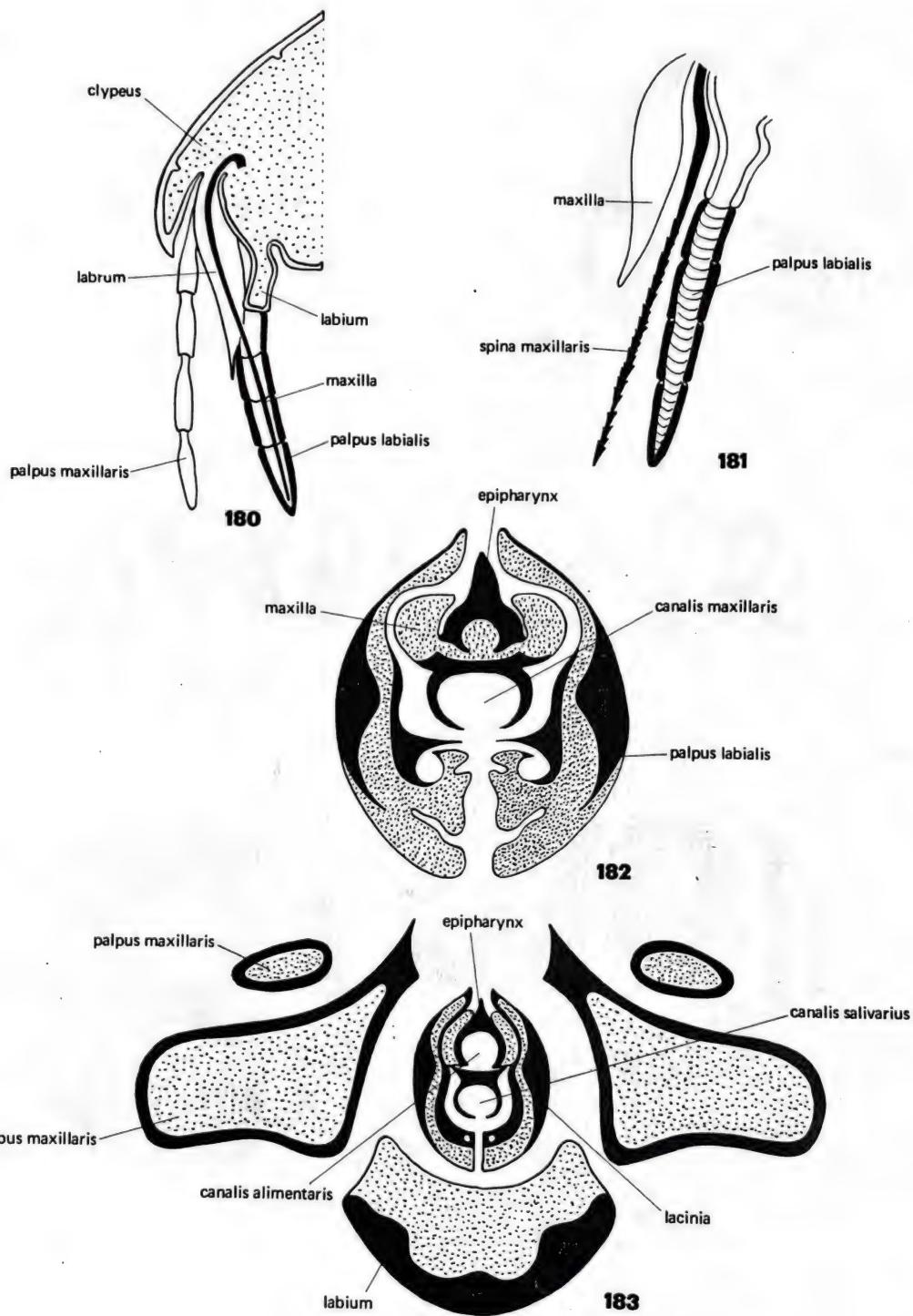
Figs. 162–166. Mouthparts of the piercing-sucking type with four stylets. — 162–164: Typical Hemiptera head, 162: in frontal view, 163: in lateral view, and 164: in ventral view. 165: Apical portion of a stylet of a typical Hemiptera, and 166: head in lateral view of a Fulgora-type (Homopt.) (after Weber 162–164, 166, and Gaze 165)



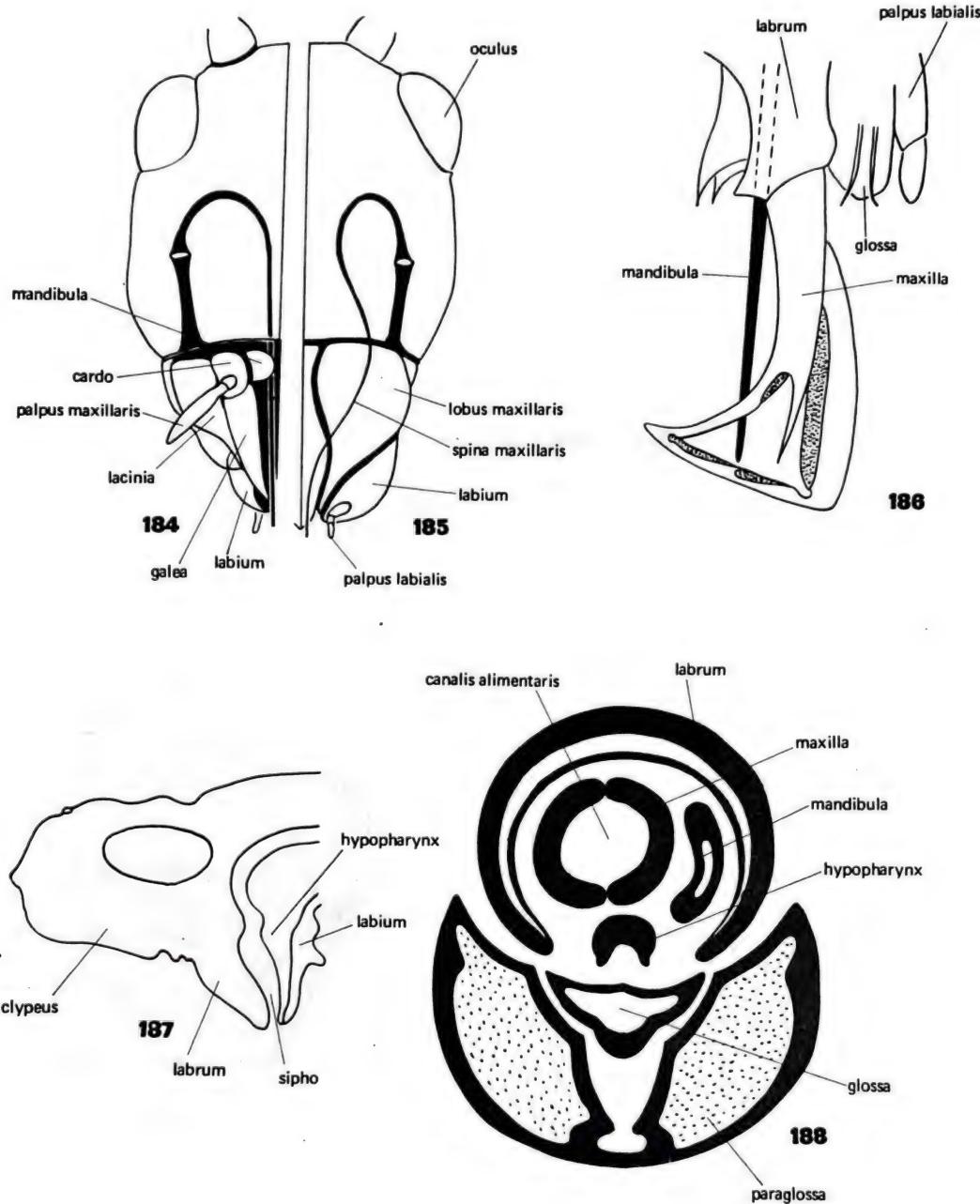
Figs. 167–173. The piercing-sucking apparatus with four stylets in various positions. — 167–170: In Heteroptera, 167: Capsus-type, 168: Coptosoma-type, 169: Aradus-type, and 170: Graphosoma-type. 171–173: In Homoptera, 171: Aphis-type, 172: Psylla-type, and 173: Coccida-type (after Shvanvich)



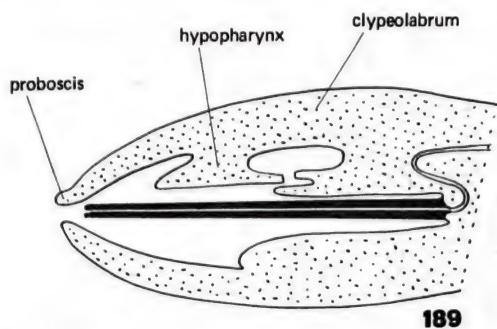
Figs. 174–179. Mouthparts of the piercing-sucking type with four stylets in cross-section. — 174–175: Cimex-type (Heteropt.), 174: basal, and 175: apical. 176–177: Naucoris-type (Heteropt.), 176: apical, and 177: basal. 178: Anasa-type (Heteropt.), and 179: Aphid-type (Heteropt.) (after Kemper 175–175, Shvanvich 176–177, Davidson 178, and Tower 179)



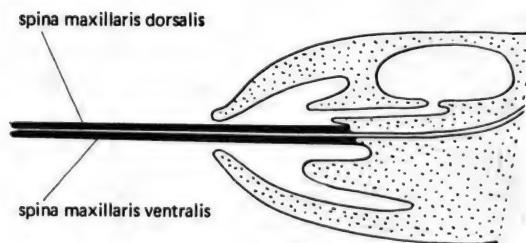
Figs. 180–183. Mouthparts of the Siphonaptera-type with three stylets. — 180: Siphonaptera head in longitudinal section, 181: the stylet of the flea (spina maxillaris), 182–183: cross-section of proboscis at 182: apical, and 183: basal portion (after Wenk)



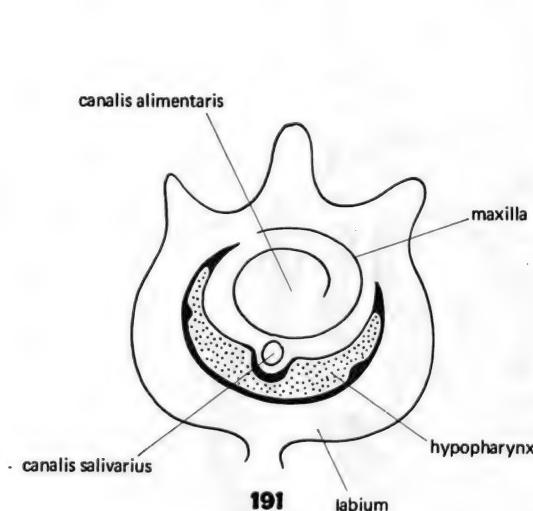
Figs. 184–188. Mouthparts of the Thysanoptera-type with three stylets. — 184–185: Head of a thrips in 184: frontal view, and 185: posterior view. 186: Mouthparts of Dinothrips. 187: Head of a thrips in lateral view, and 188: cross-section of the proboscis (after Mickoleit)



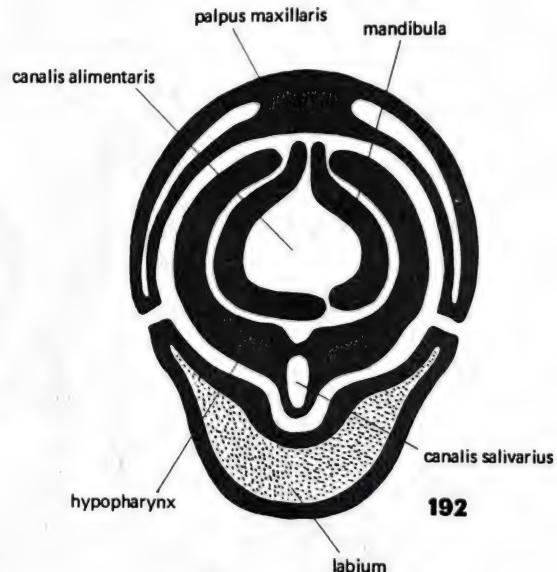
189



190



191



192

Figs. 189–192. Mouthparts of the Anoplura-type with three fused stylets. — 189–190: Schematic drawing of an Anoplura head with proboscis, 189: in resting position, and 190: at time of sucking. 191–192: Cross-section of a proboscis with 191: fused maxillae, and 192: free maxillae (after Ramcke 189–190, Vogel 191, and Shvanvich 192)

# THE THORAX

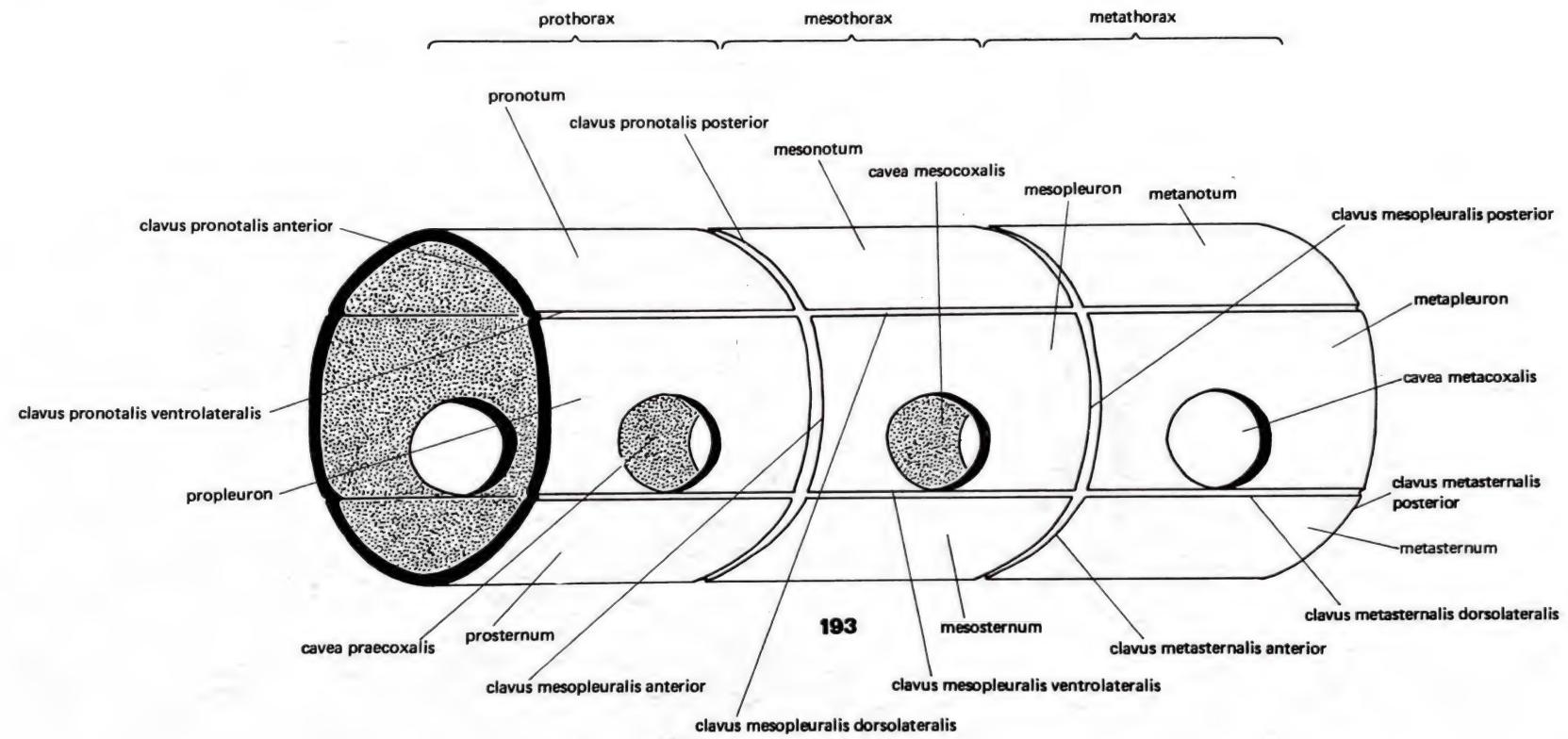


Fig. 193. Diagrammatic representation of the wingless thorax

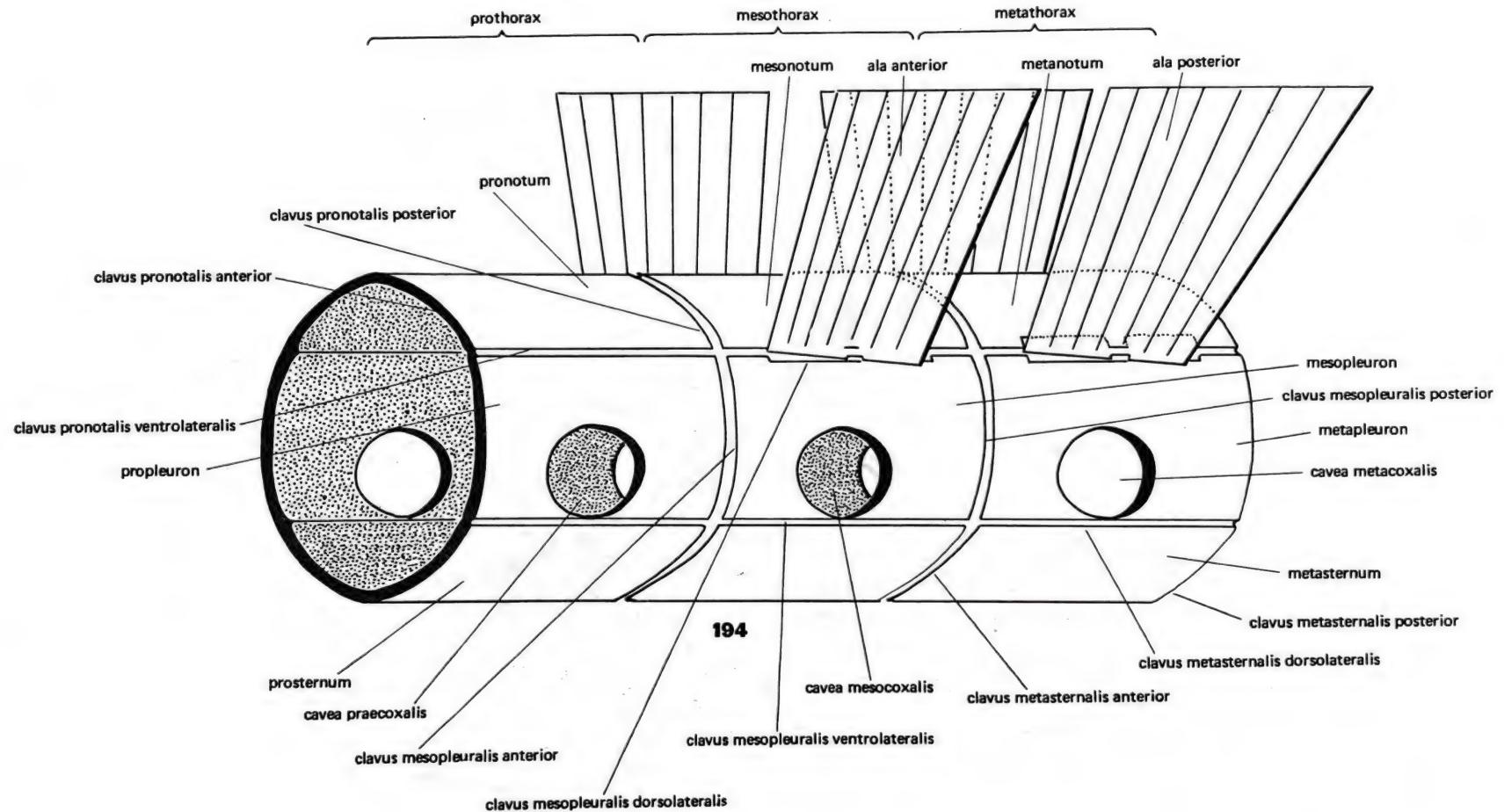


Fig. 194. Diagrammatic representation of the winged thorax

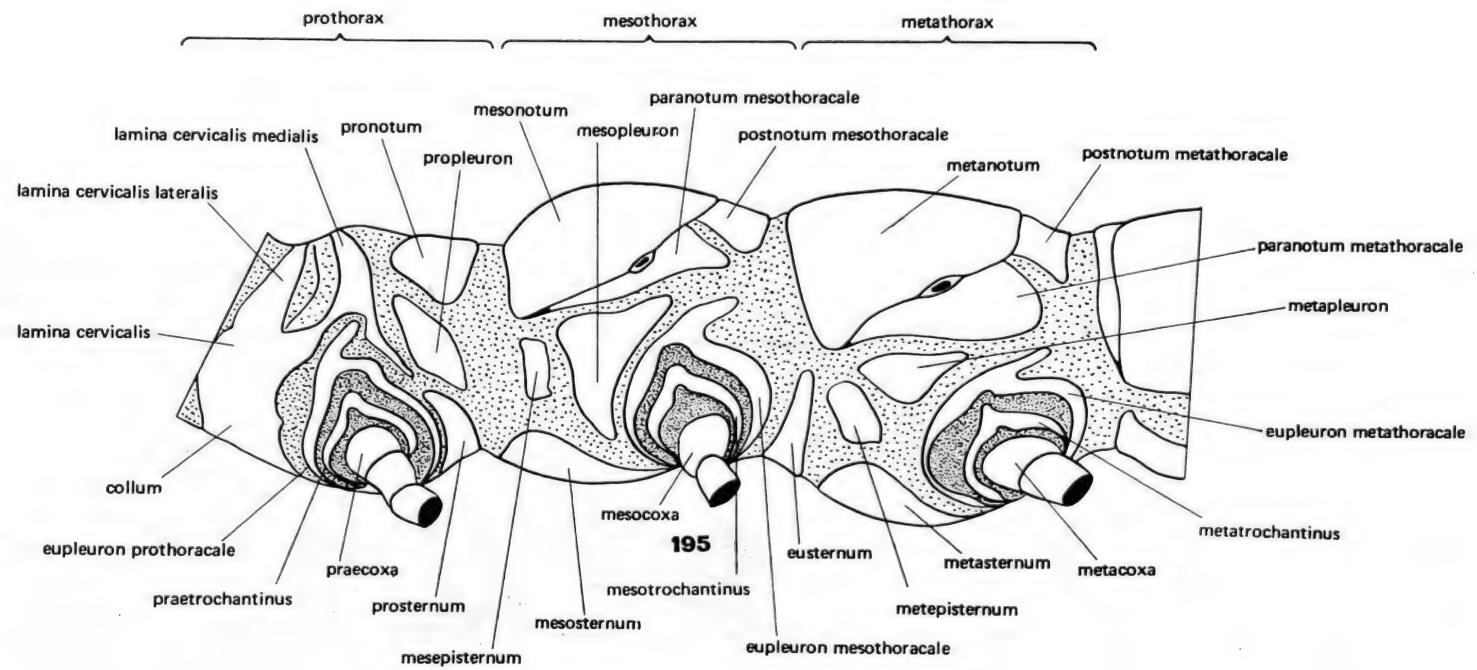
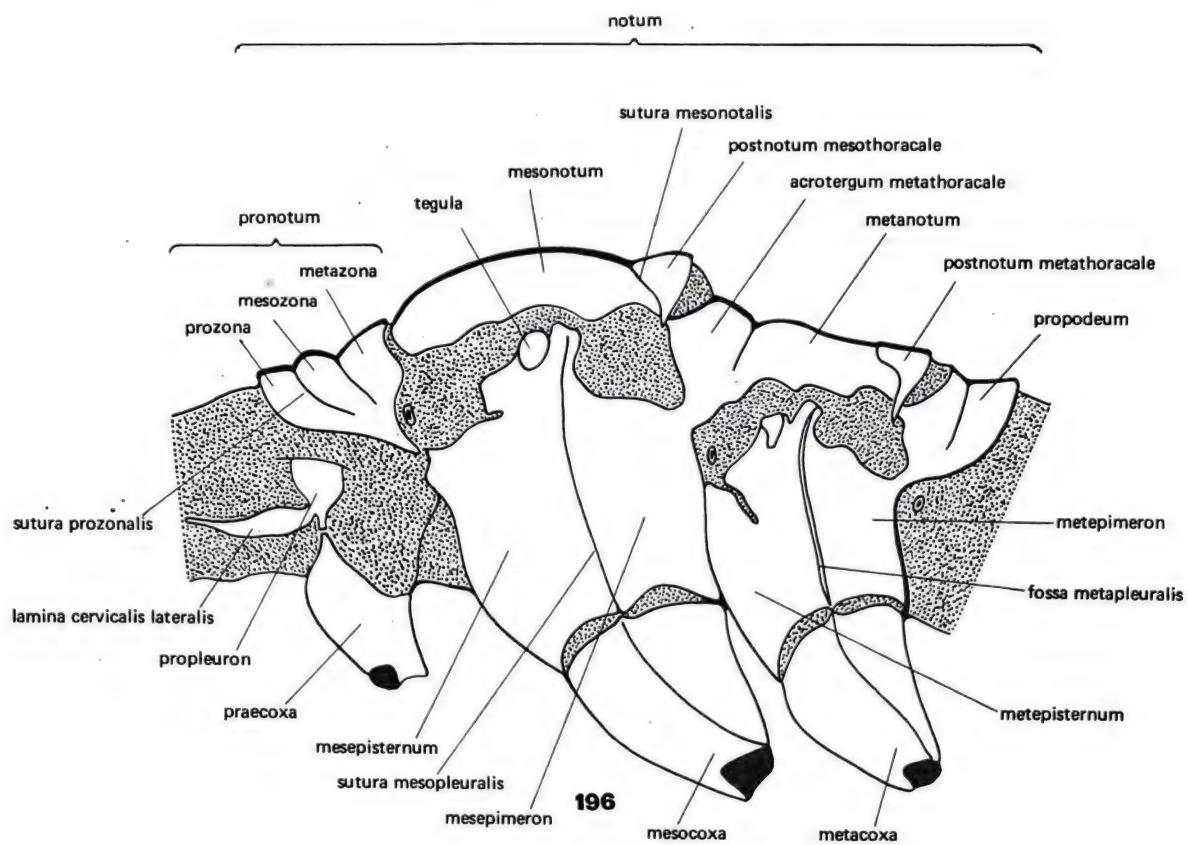
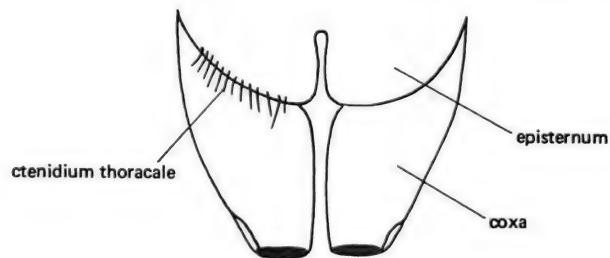


Fig. 195. Thorax of the primitive insect in lateral view (after Matsuda)

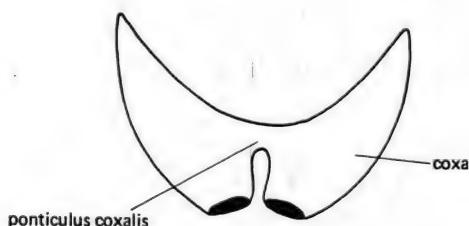
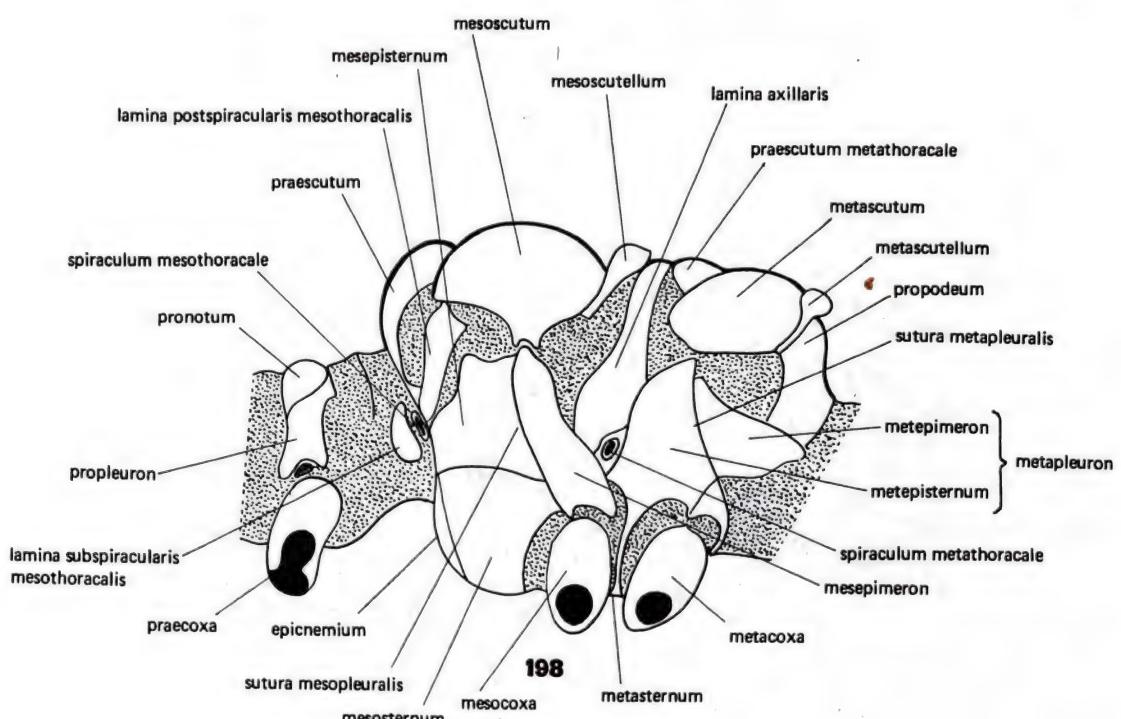


196

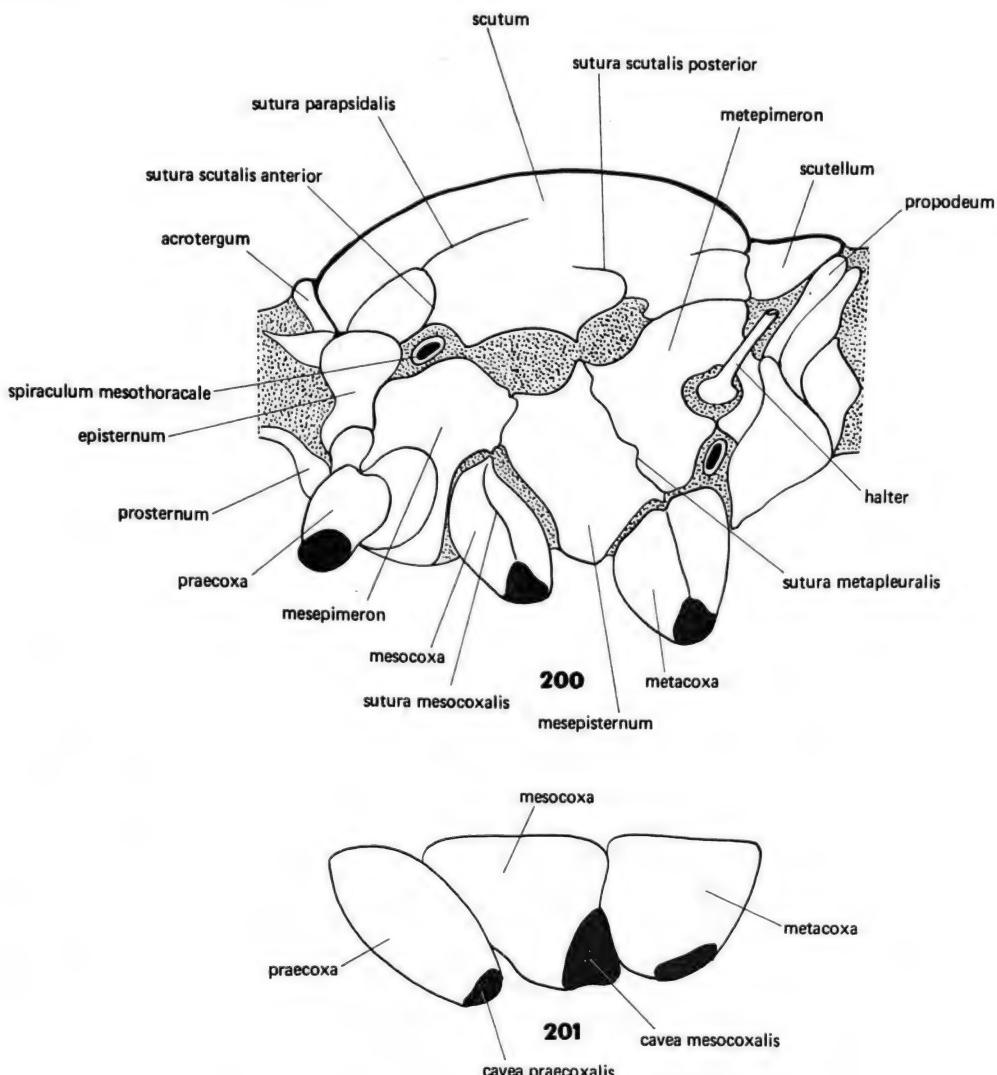


197

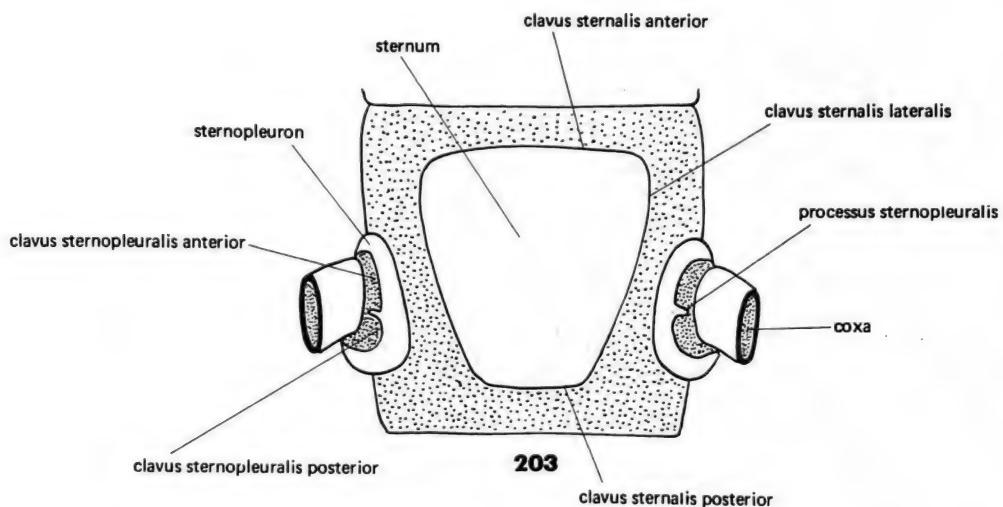
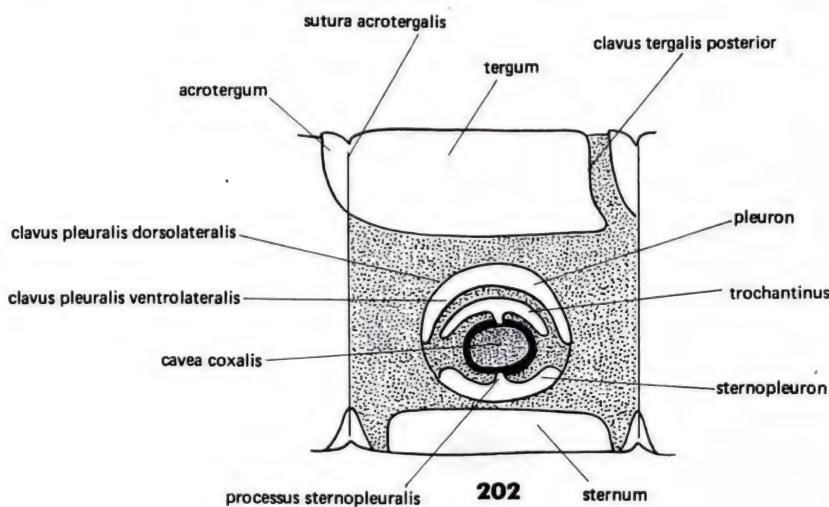
Figs. 196–197. Thorax of the Mecoptera-type. — 196: In lateral view, and 197: in frontal view (after Matsuda)



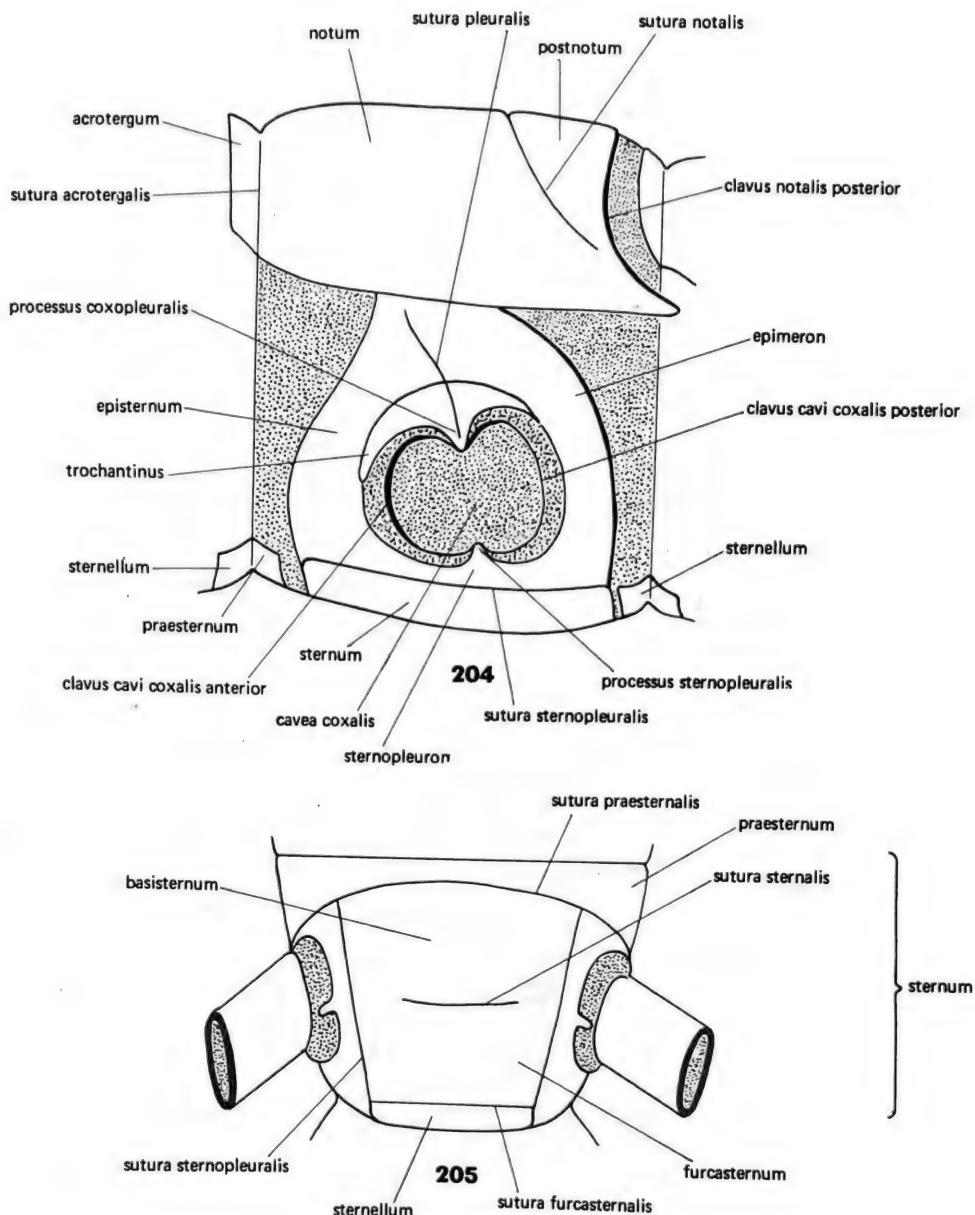
Figs. 198–199. Thorax of the Psocoptera-type. — In lateral view, and 199: in frontal view (after Cope)



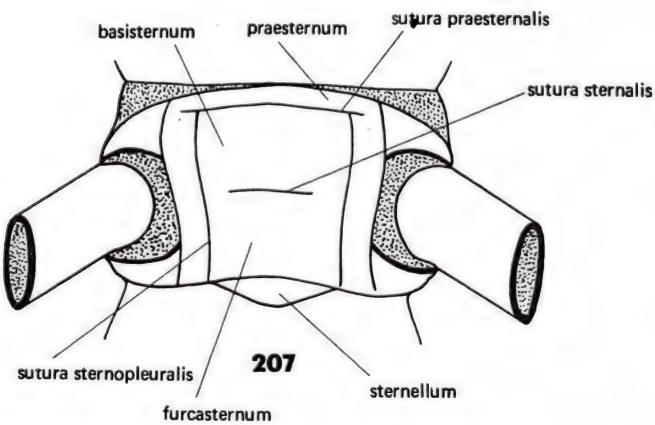
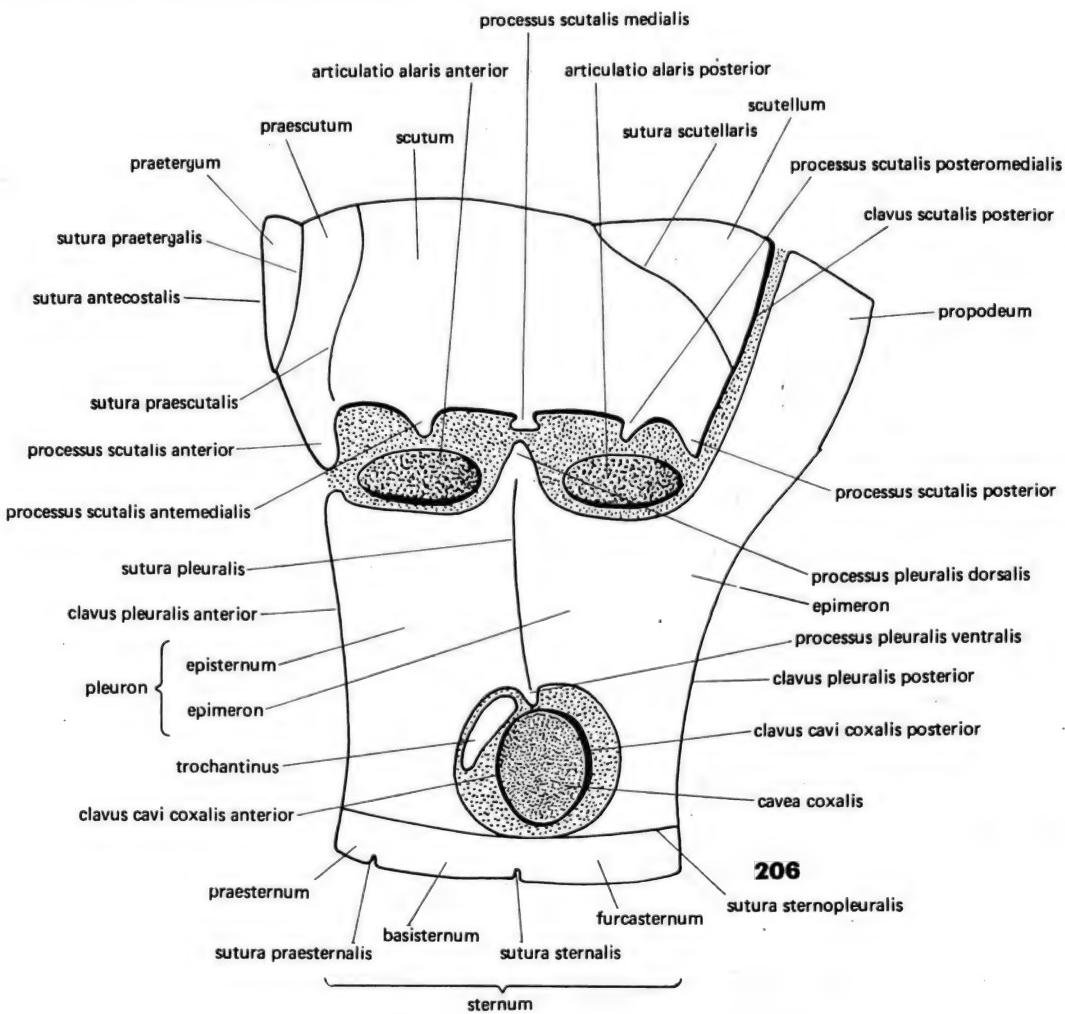
Figs. 200–201. Thorax of the Diptera-type. — 200: In lateral view, and 201: set of close coxae (after Rees)



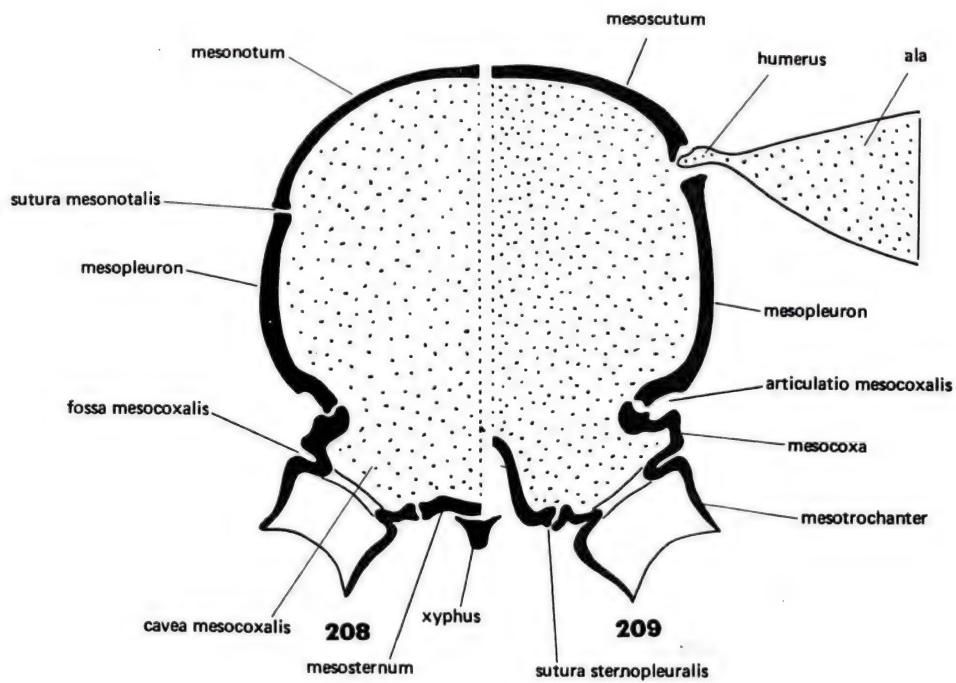
Figs. 202–203. Schematic drawing of a thoracic segment. — 202: In lateral view, and 203: in ventral view (after Snodgrass)



Figs. 204–205. Schematic drawing of a wingless thoracic segment. — 204: In lateral view, and 205: in ventral view (after Snodgrass)



Figs. 206–207. Schematic drawing of a winged thoracic segment. — 206: In lateral view, and 207: in ventral view (after Snodgrass)



Figs. 208–209. Schematic drawing of the mesothoracic segment in cross-section. — 208: Wingless, and 209: winged halves

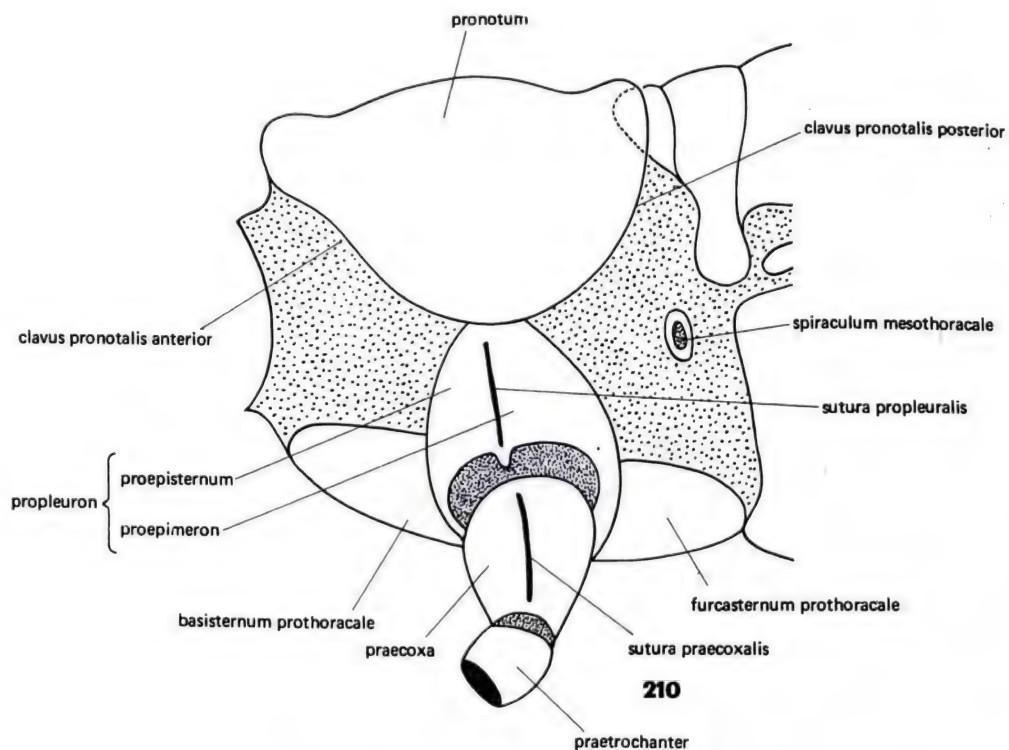
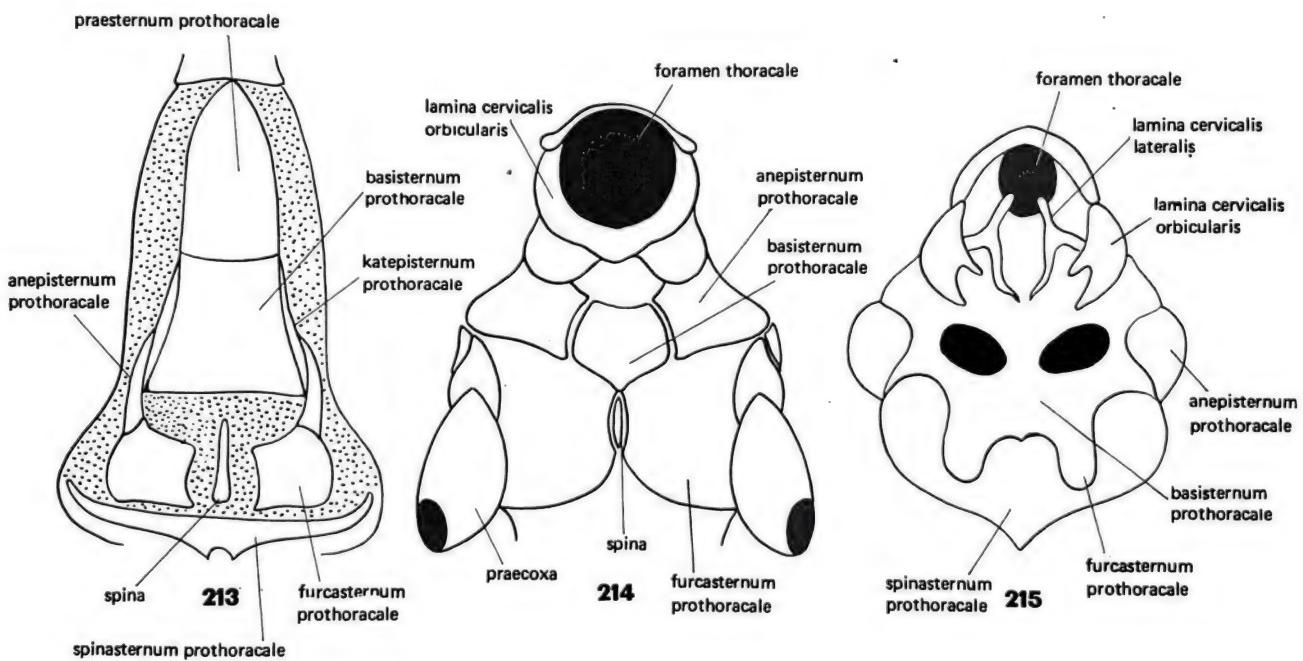
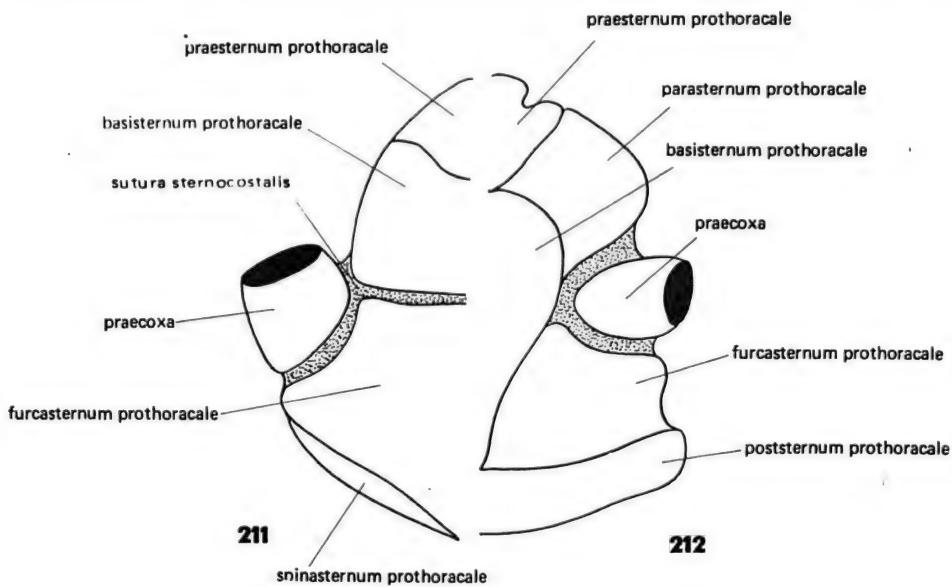
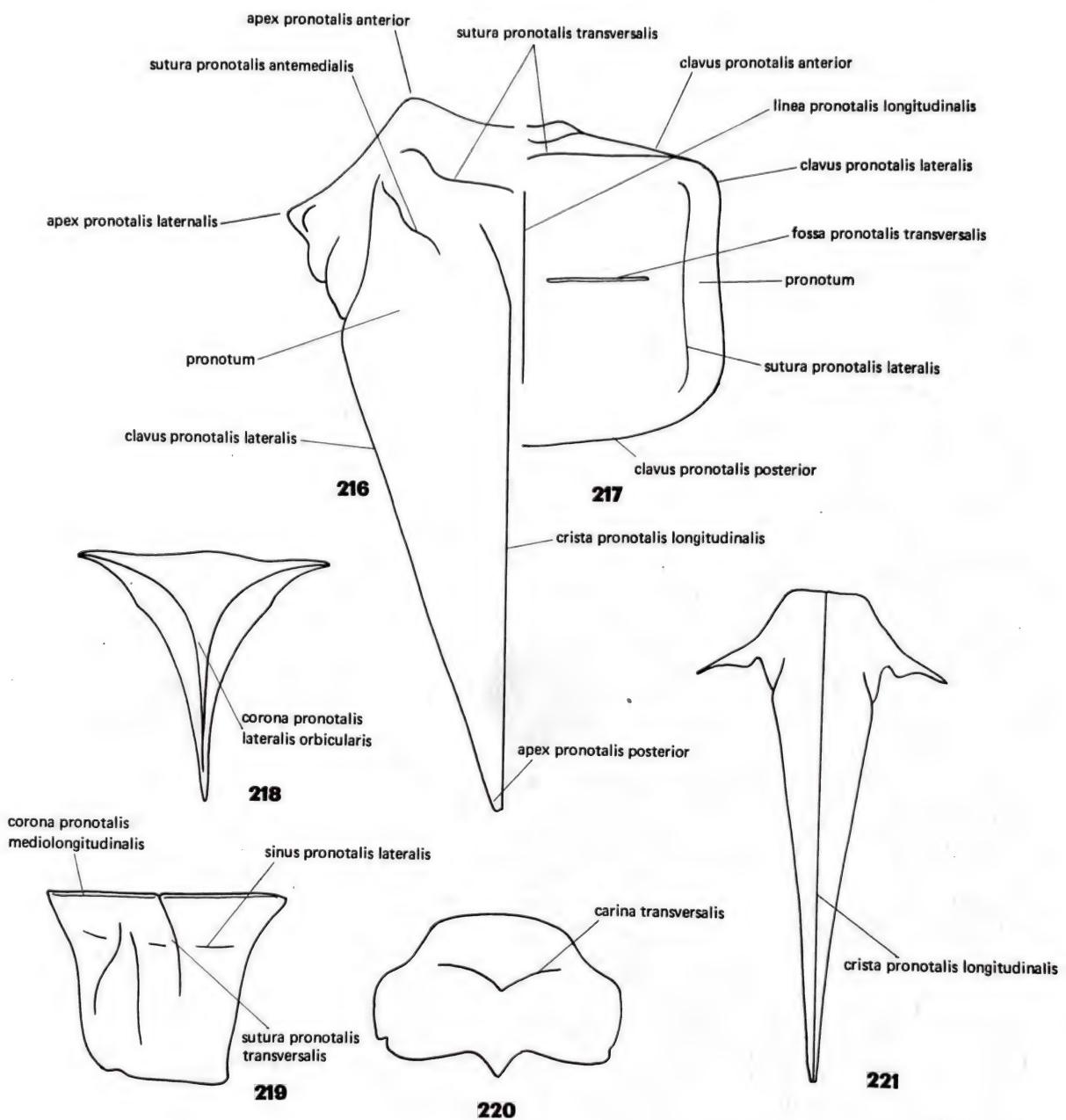


Fig. 210. Schematic drawing of the prothorax in lateral view



Figs. 211–215. The prothorax in ventral view. — 211–212: The Apterygota-types, 211: *Eosentomon* (Protura), and 212: *Japyx* (Diplura). 213–215: The Pterygota-types, 213: *Agulla* (Raphidiopt.), 214: *Zorotypus* (Zorapt.), and 215: *Hepialus* (Lepidopt.) (after Matsuda)



Figs. 216–221. The prothorax in dorsal view. — 216: Mazzaredia (Orthopt.), 217: Carcinophora (Dermapt.), 218: Ceresa (Homopt.), 219: Arcyptera (Orthopt.) (in lateral view), 220: Agrion (Odon.), and 221: Criotettix (Orthopt.).

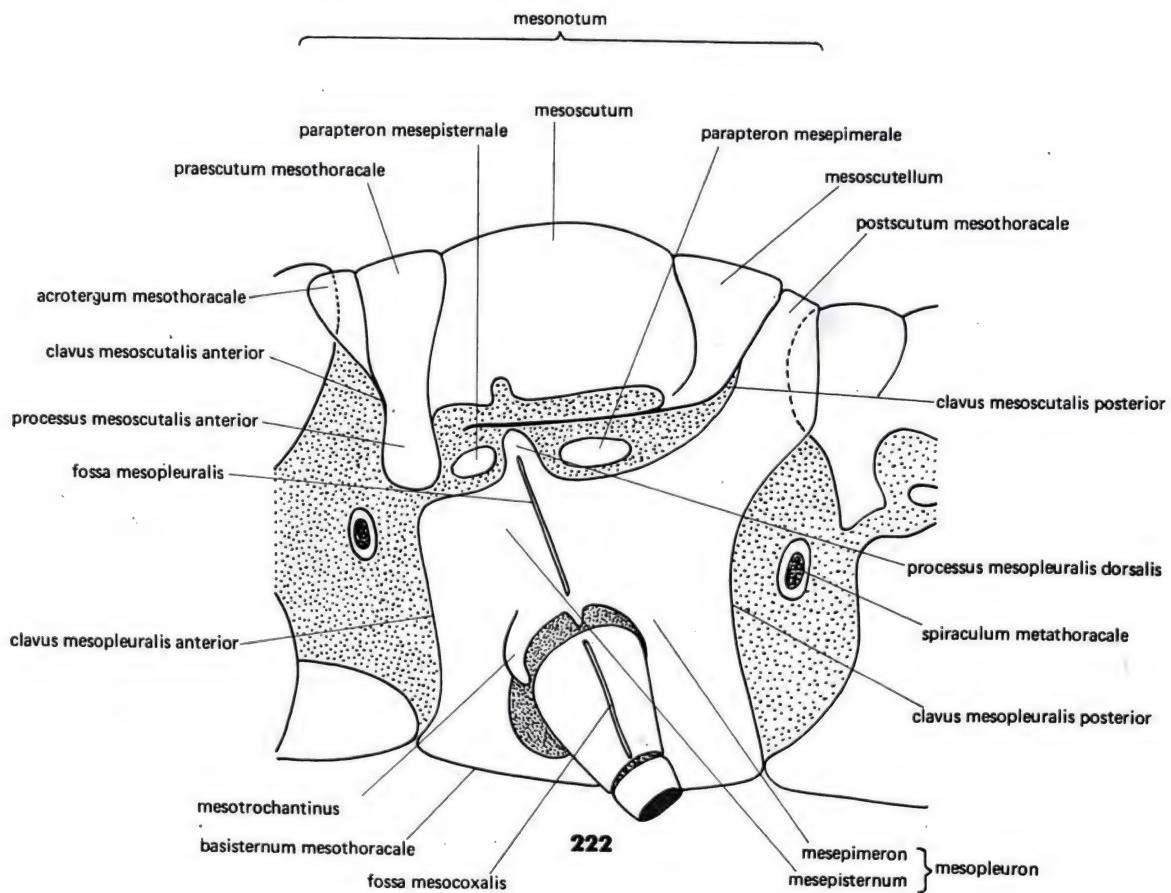
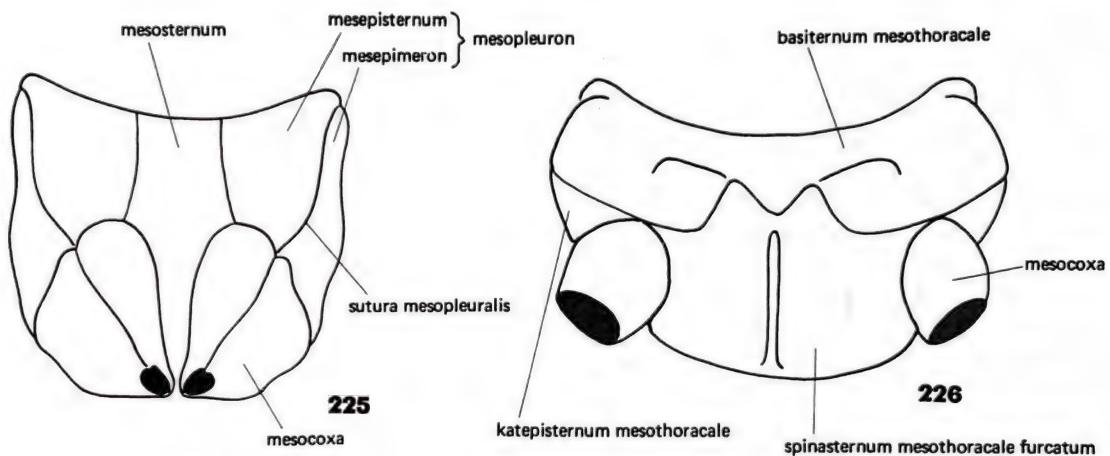
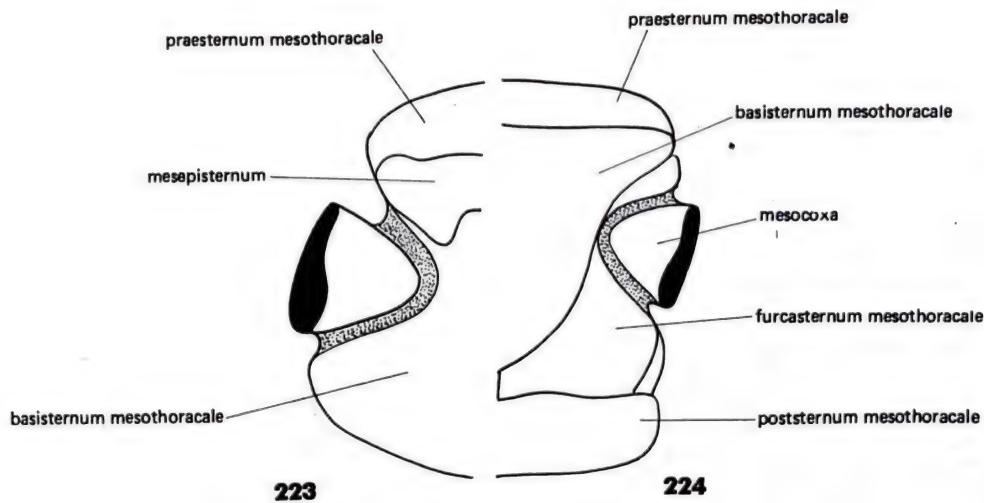


Fig. 222. Schematic drawing of the mesothorax in lateral view



Figs. 223–226. The mesothorax in ventral view. — 223–224: The Apterygota-types, 223: *Eosentomon* (Protura), and 224: *Japyx* (Diplura). 225–226. The Pterygota-types, 225: *Papilio* (Lepidopt.), and 226: *Perla* (Plecopt.) (after Matsuda 225–226)

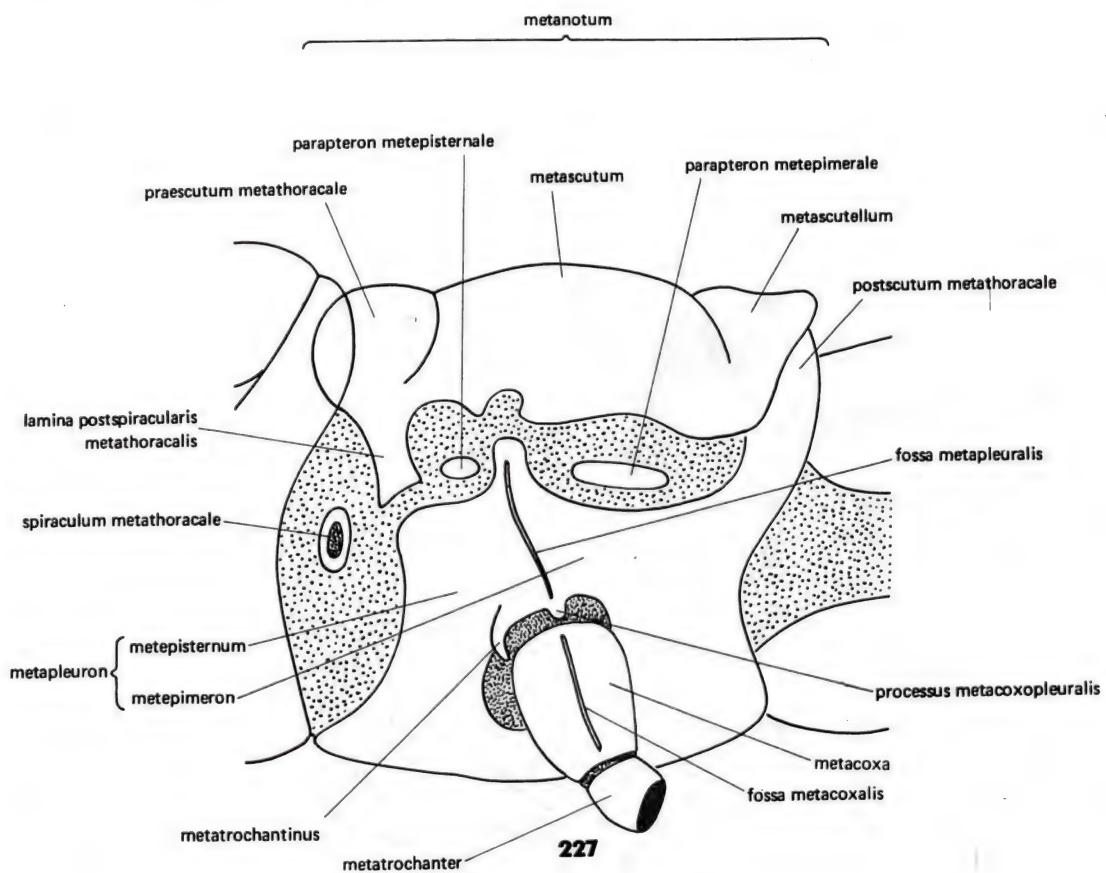
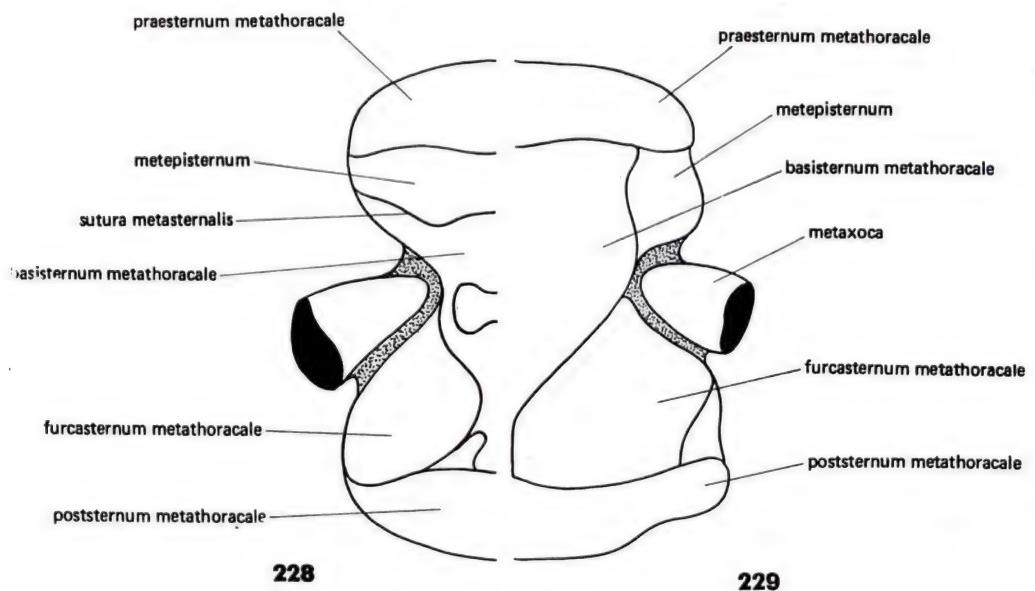
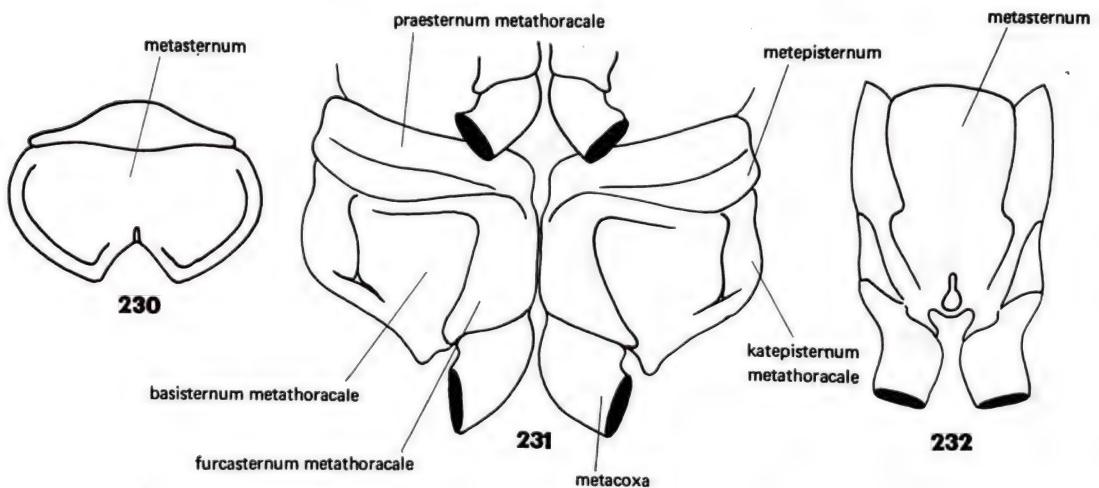


Fig. 227. Schematic drawing of the metathorax in lateral view



228

229



230

231

232

Figs. 228–232. The metathorax in ventral view. — 228–229: The Apterygota-types, 228: *Eosentomon* (Protura), and 229: *Japyx* (Diplura). — 230–232: The Pterygota-types, 230: *Belocephalus* (Orthopt.), 231: *Blabera* (Blatt.), and 232: *Hierodula* (Orthopt.) (after Matsuda 230–232)

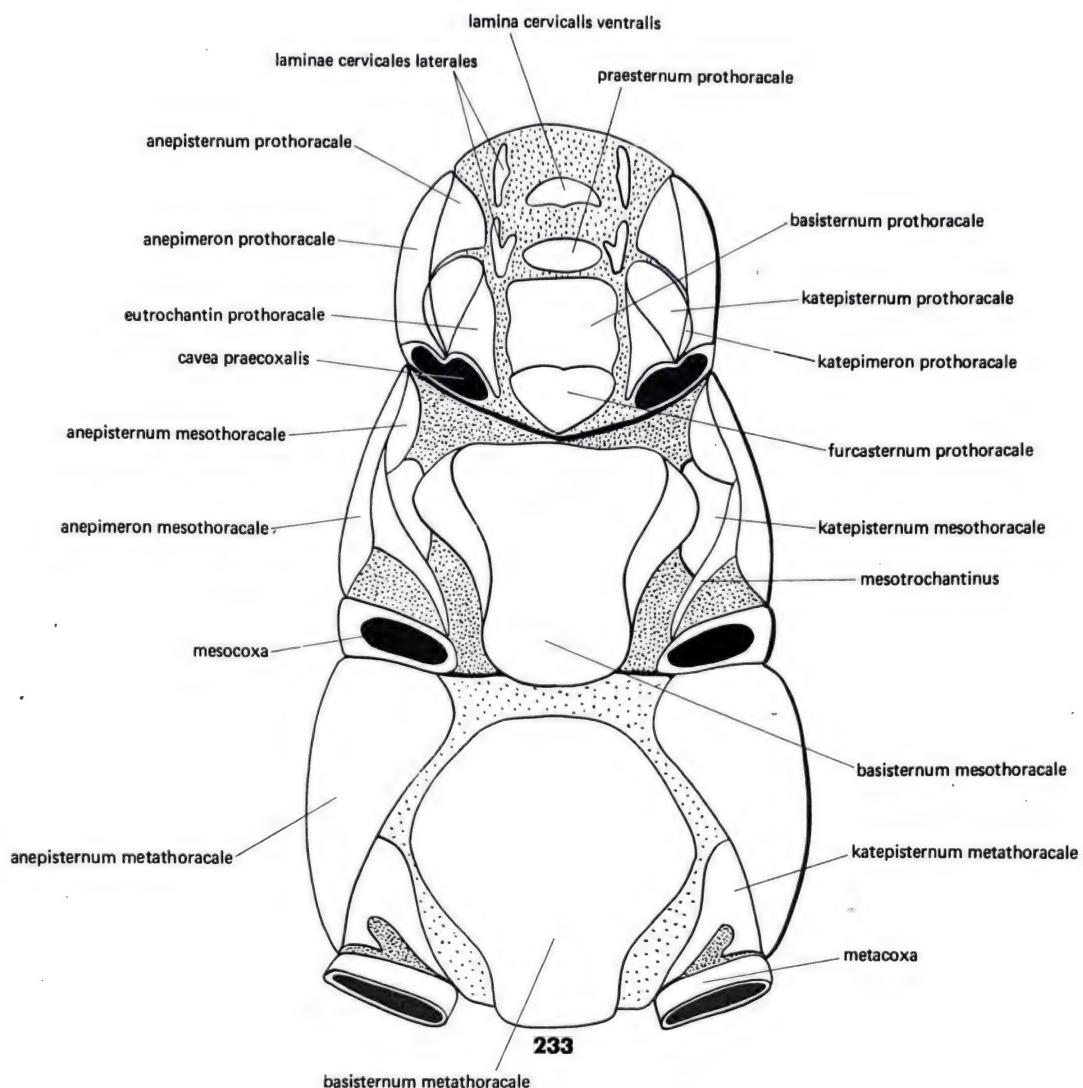
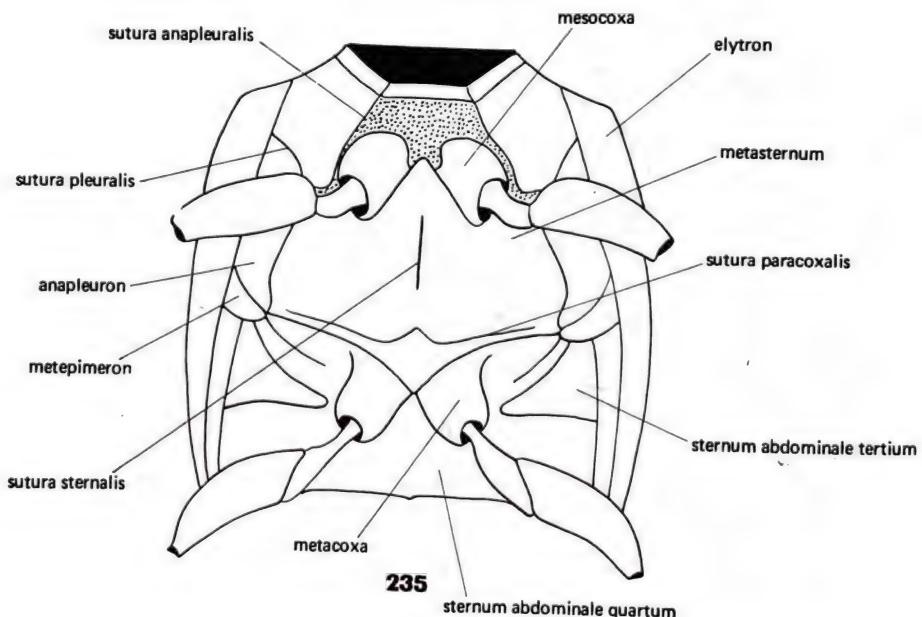
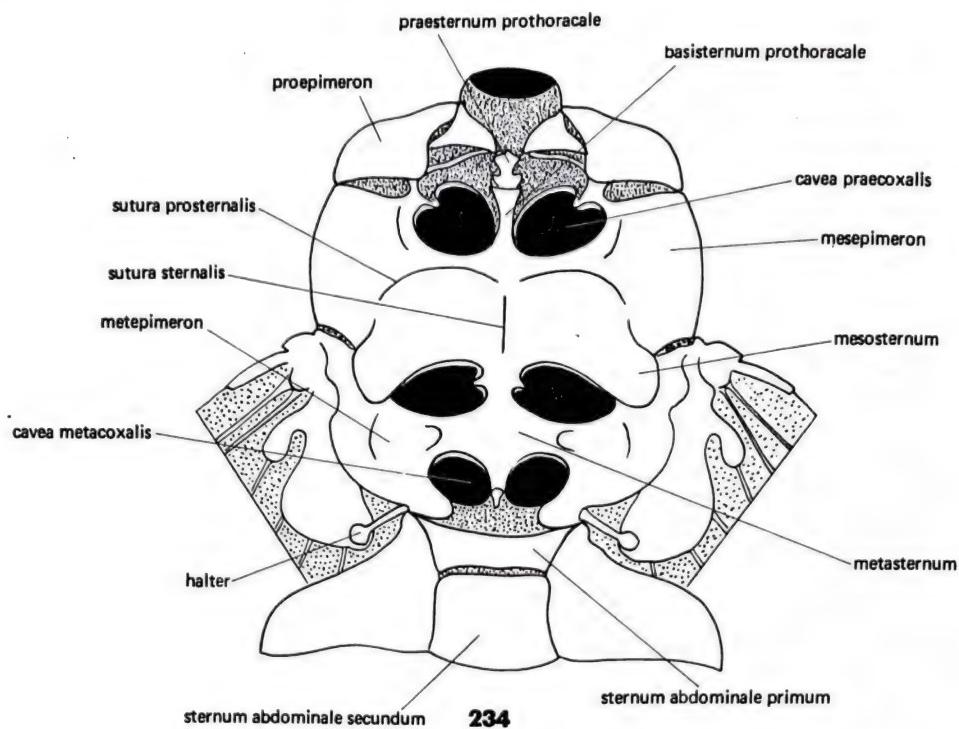
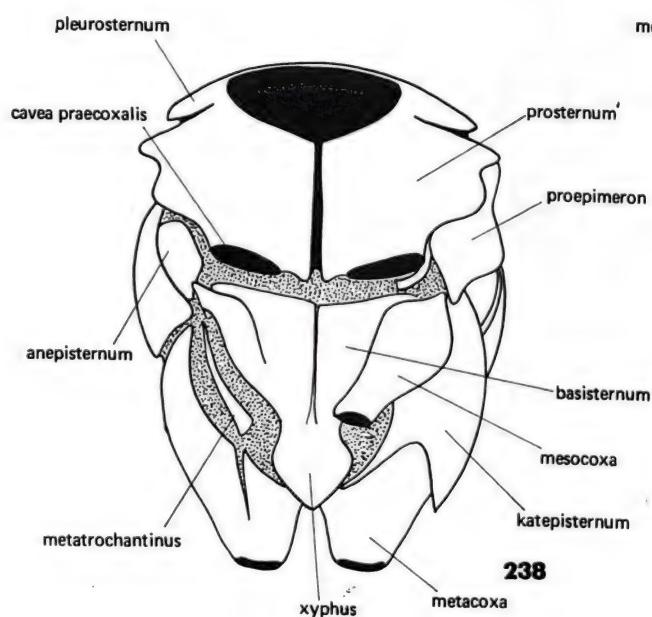
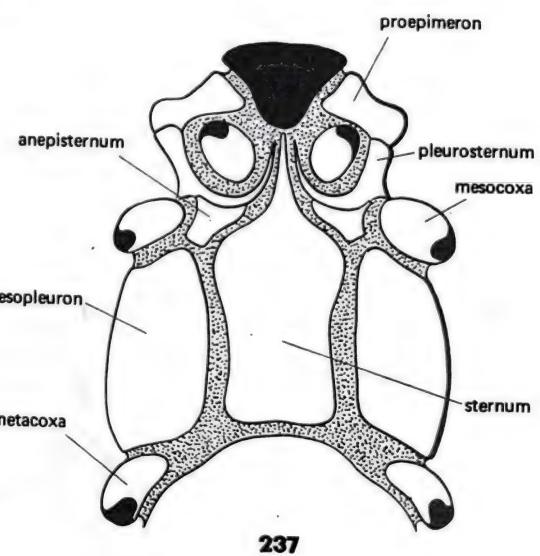
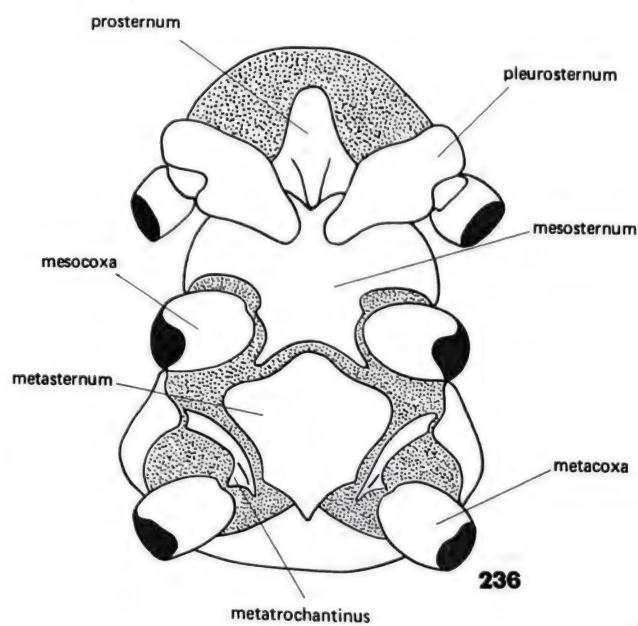


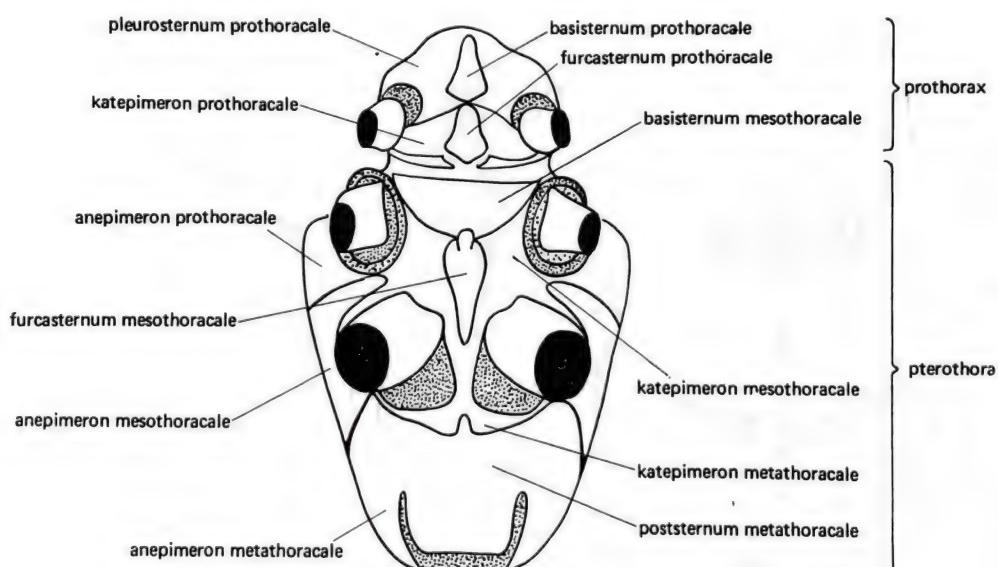
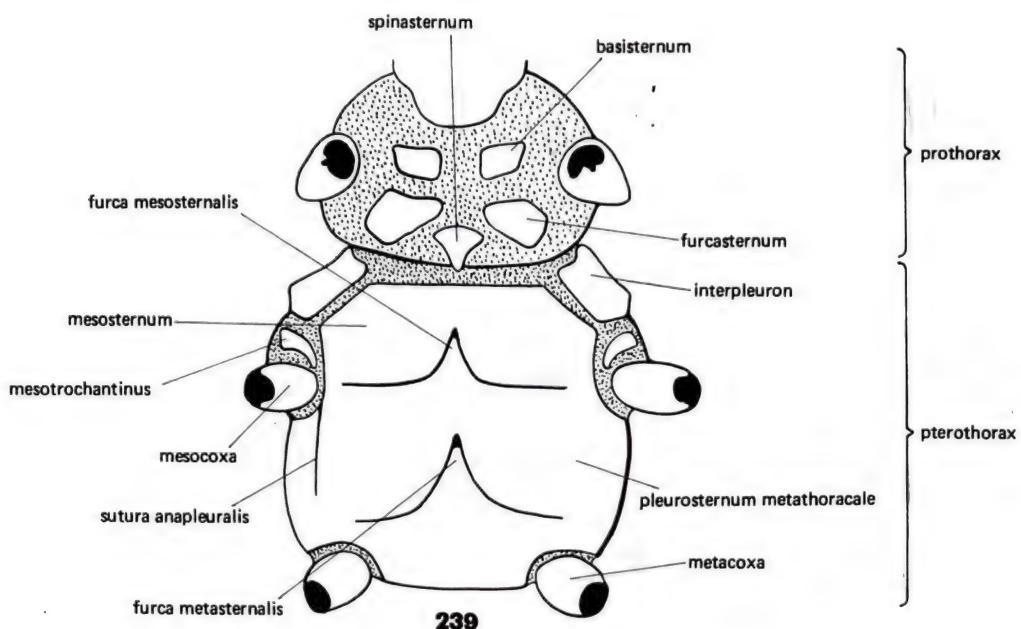
Fig. 233. The thorax of the Dermaptera-type in ventral view



Figs. 234—235. The thorax in ventral view. — 234: Thorax and first two abdominal sternites of a Diptera, and 235: the meso- and metasternum of a Coleoptera (after Snodgrass 234, and Larsen 235)

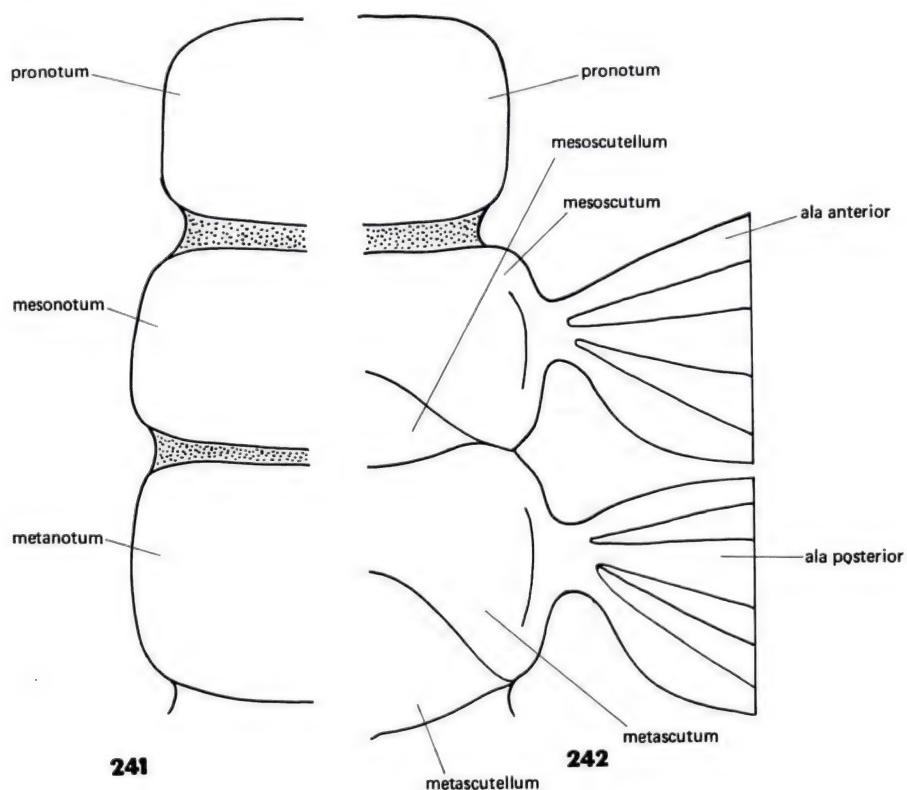


Figs. 236–238. The thorax in ventral view. — 236: Myrsidea-type (Mall.), 237: Esthiopterum-type (Mall.), and 238: Notonecta-type (Heteropt.) (after Cope 236, Mayer 237, and Matsuda 238)

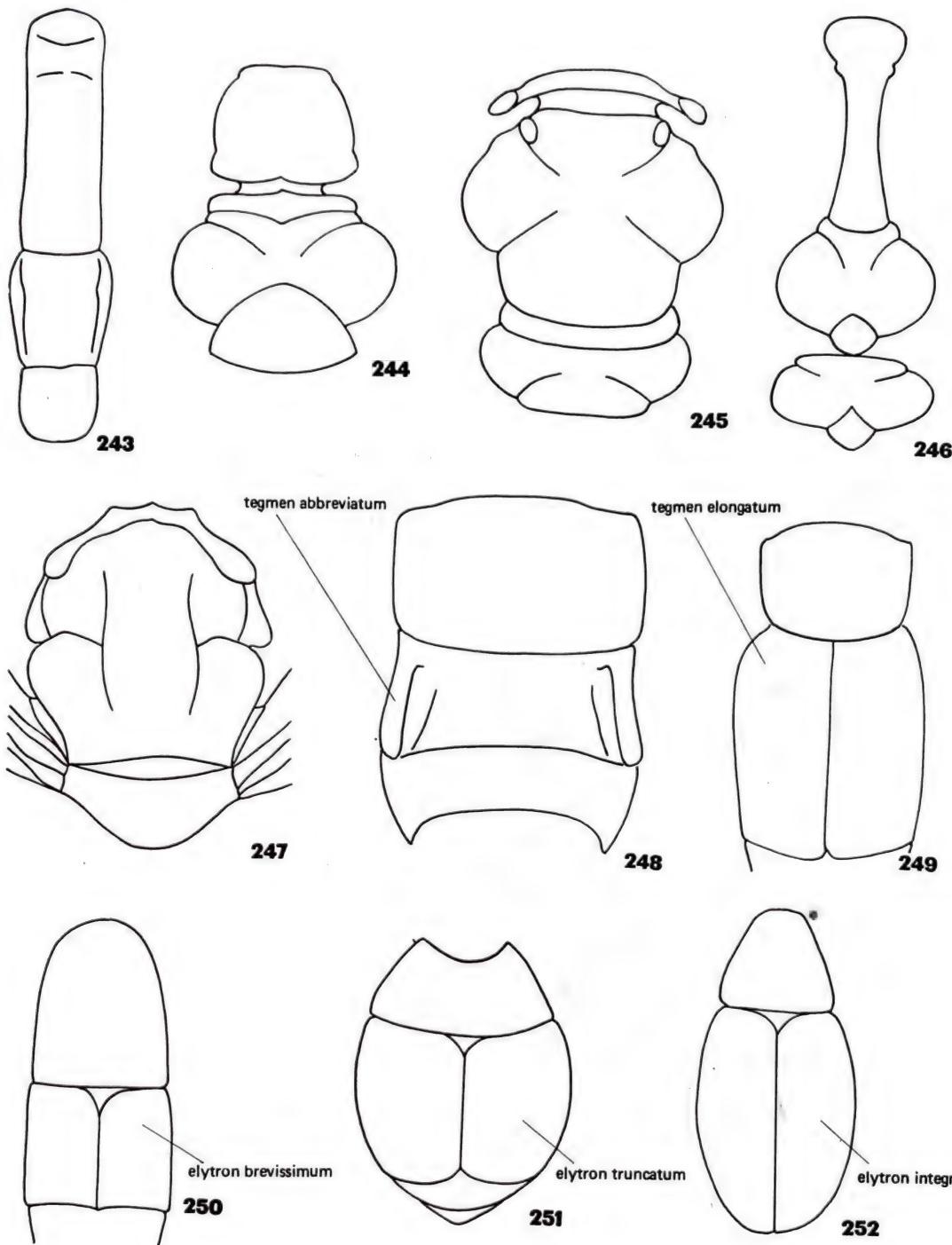


240

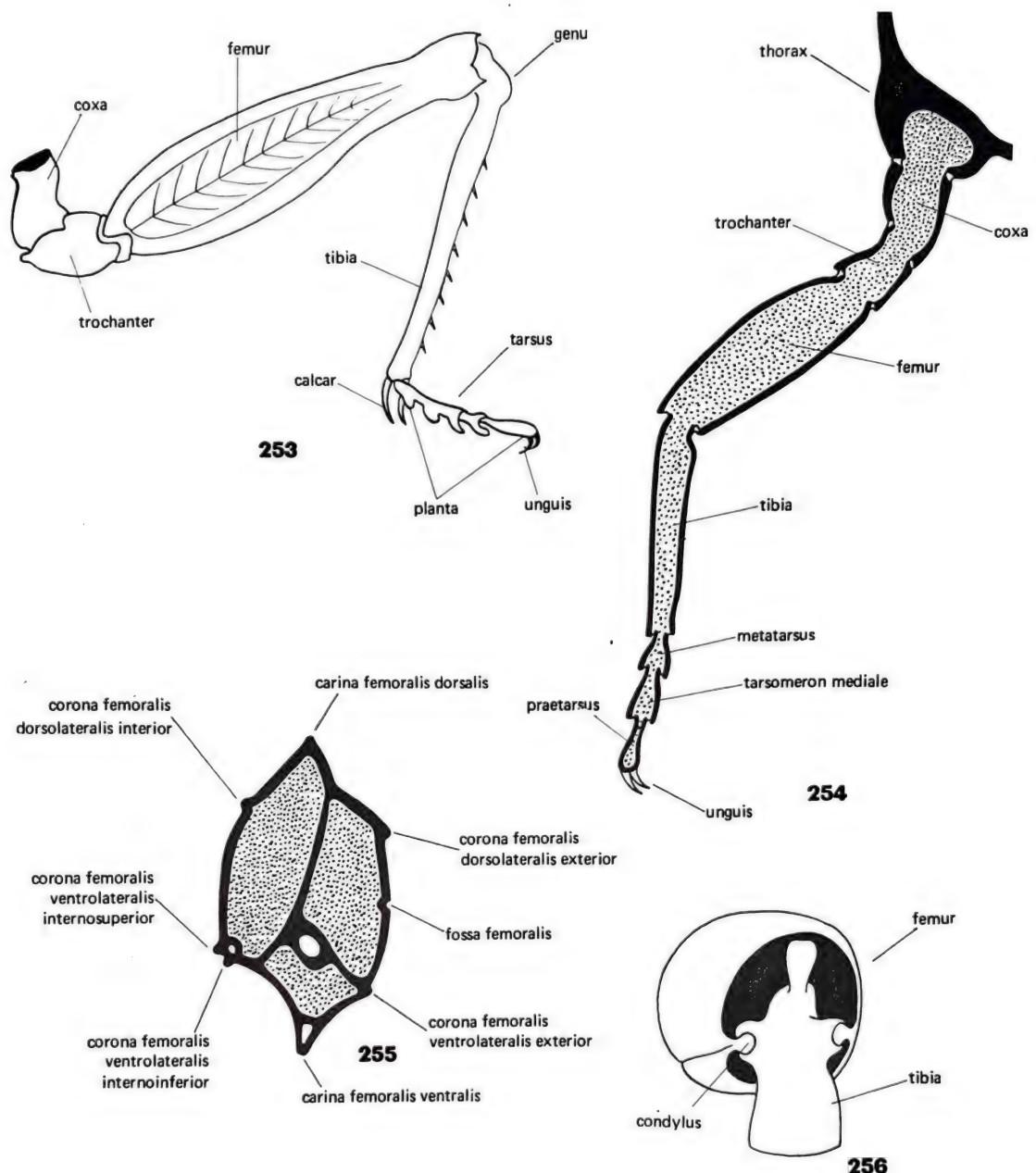
Figs. 239–240. The thorax in ventral view. — 239: Thrips-type (Thysanopt.), and 240: Mnais-type (Odon.) (after Mickoleit 239, and Asahina 240)



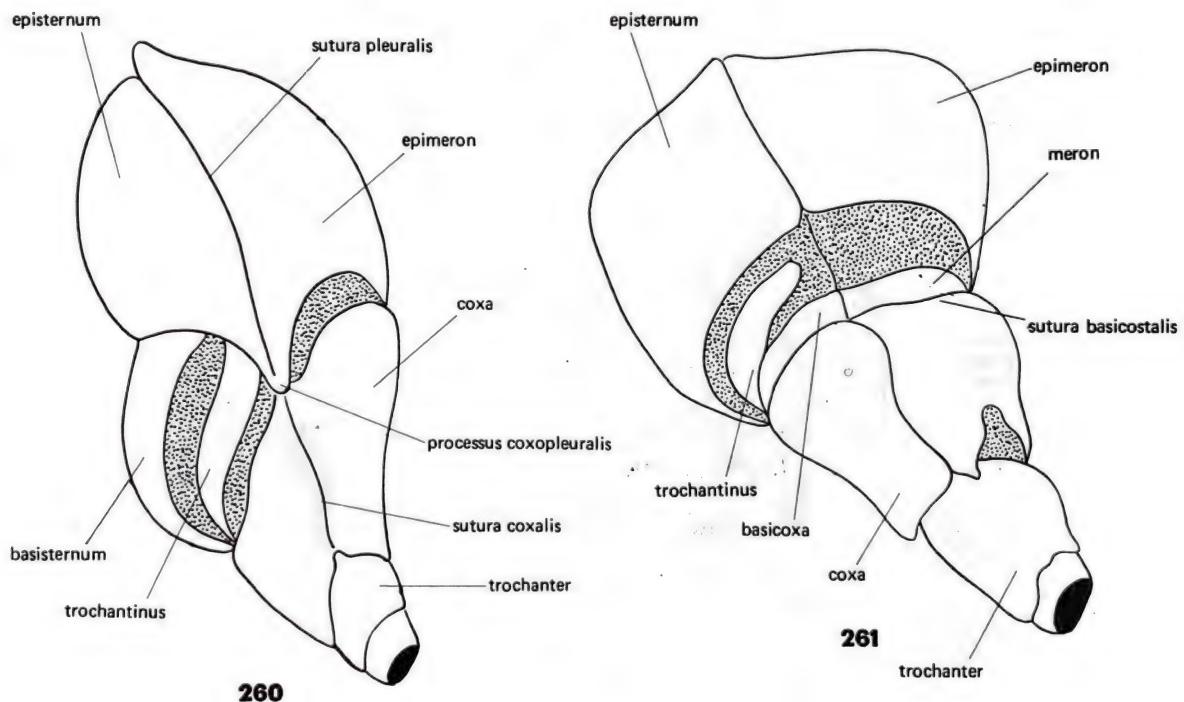
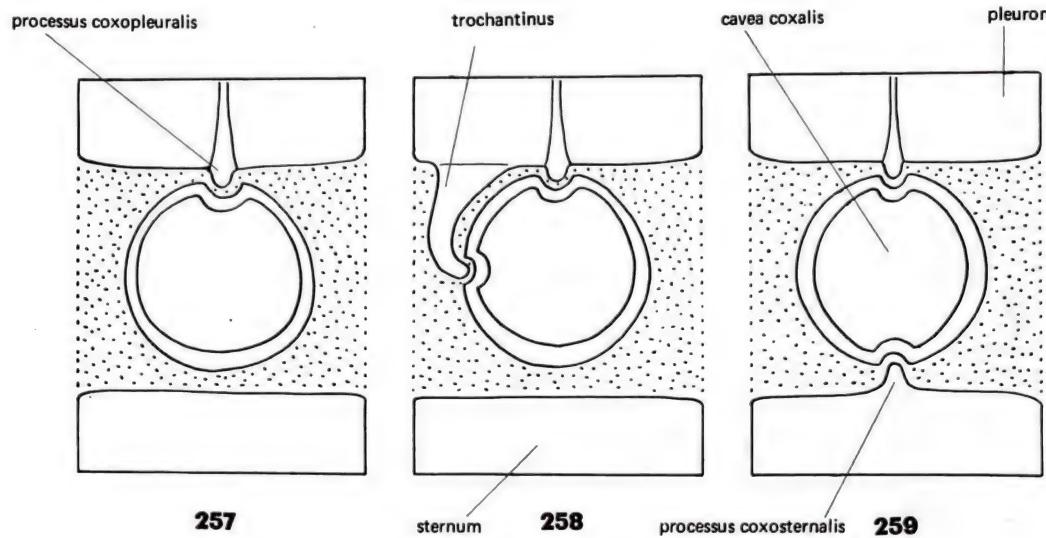
Figs. 241–242. Schematic drawing of the thorax in dorsal view. — 241: Wingless, and 242: winged



Figs. 243—252. Some typical 'thoraces in dorsal view. — 243: *Carausius* (Phasm.), 244: *Myrmeleon* (Neuropt.), 245: *Ascalaphus* (Neuropt.), 246: *Mantispa* (Neuropt.), 247: *Tabanus* (Dipt.), 248: *Anisolabis* (Dermapt.), 249: *Labidura* (Dermapt.), 250: *Staphilinus* (Coleopt.), 251: *Hister* (Coleopt.), and 252: *Brachonyx* (Coleopt.).



Figs. 253--256. The leg (pes). — 253: In lateral view, and 254: in longitudinal section. 255: Cross-section of femur. 256: The knee (articulatio femurotibialis) (after Snodgrass 256).



Figs. 257–261. The coxal articulation (*articulatio coxalis*). — 257–259: Diagrammatic illustration of the three principal types, 257: simple pleural articulation, 258: asymmetrical pleurotrochantinal articulation, and 259: symmetrical pleurosternal articulation. — 260: Articulation restricted by the coxopleural process, and 261: articulation without coxopleural process (after Snodgrass)

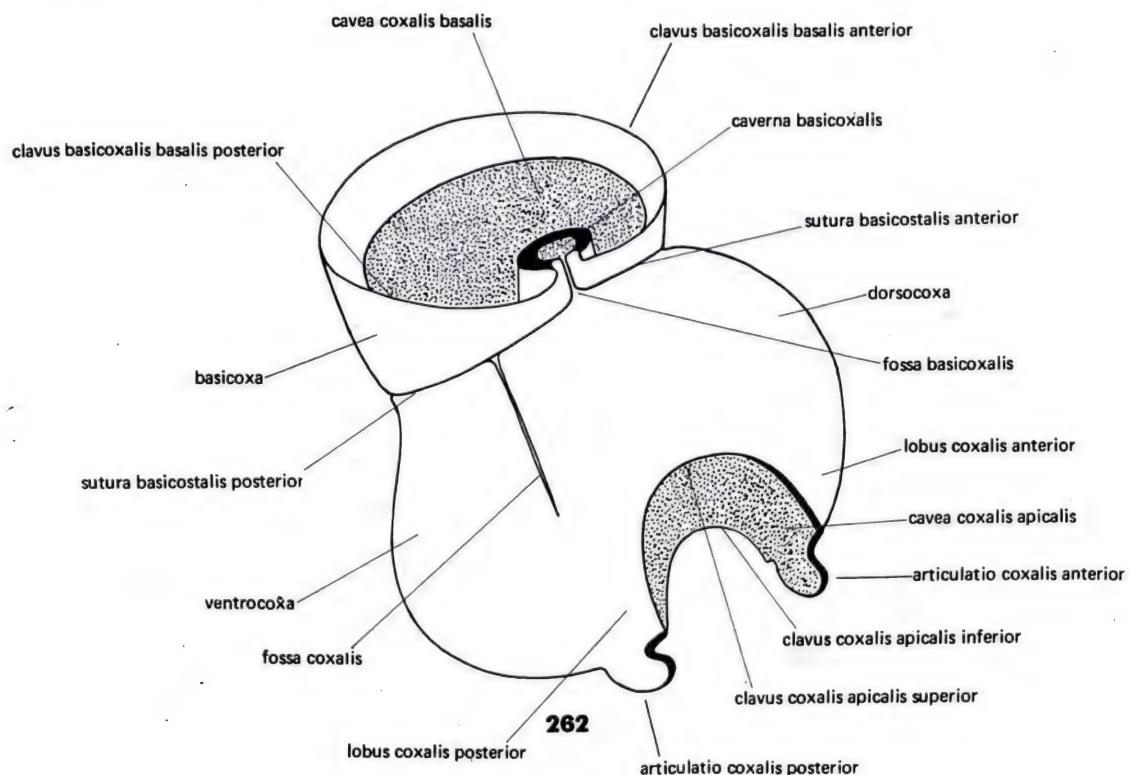


Fig. 262. The fixed coxa (coxa fixa)

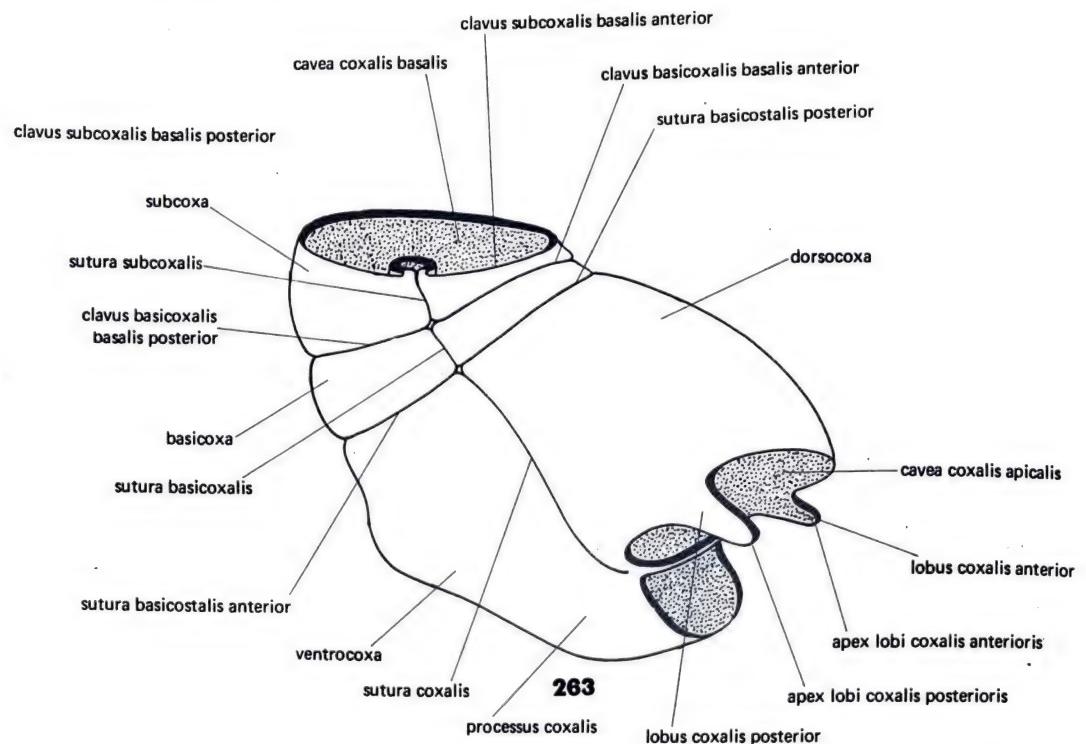
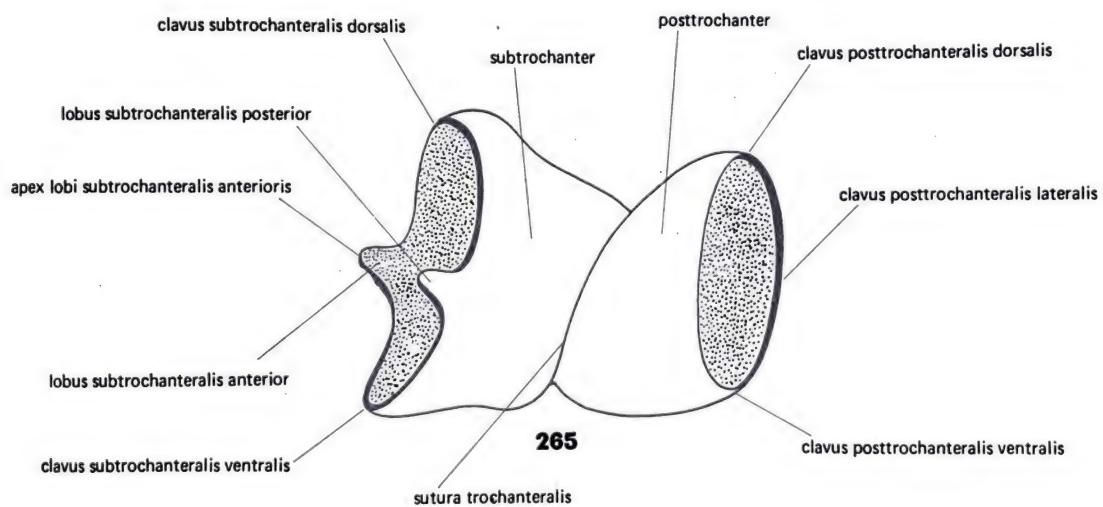
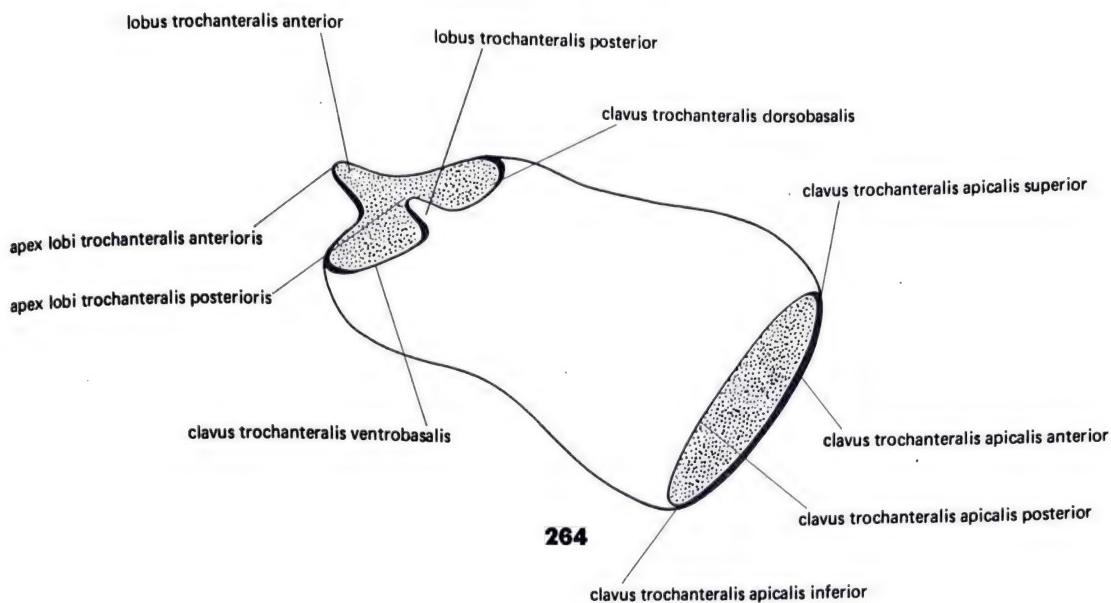


Fig. 263. The free coxa (coxa libera)



Figs. 264–265. The trochanter. — 264: Simple trochanter (trochanter simplex), 265: subtrochanter and posttrochanter (trochanter compositus)

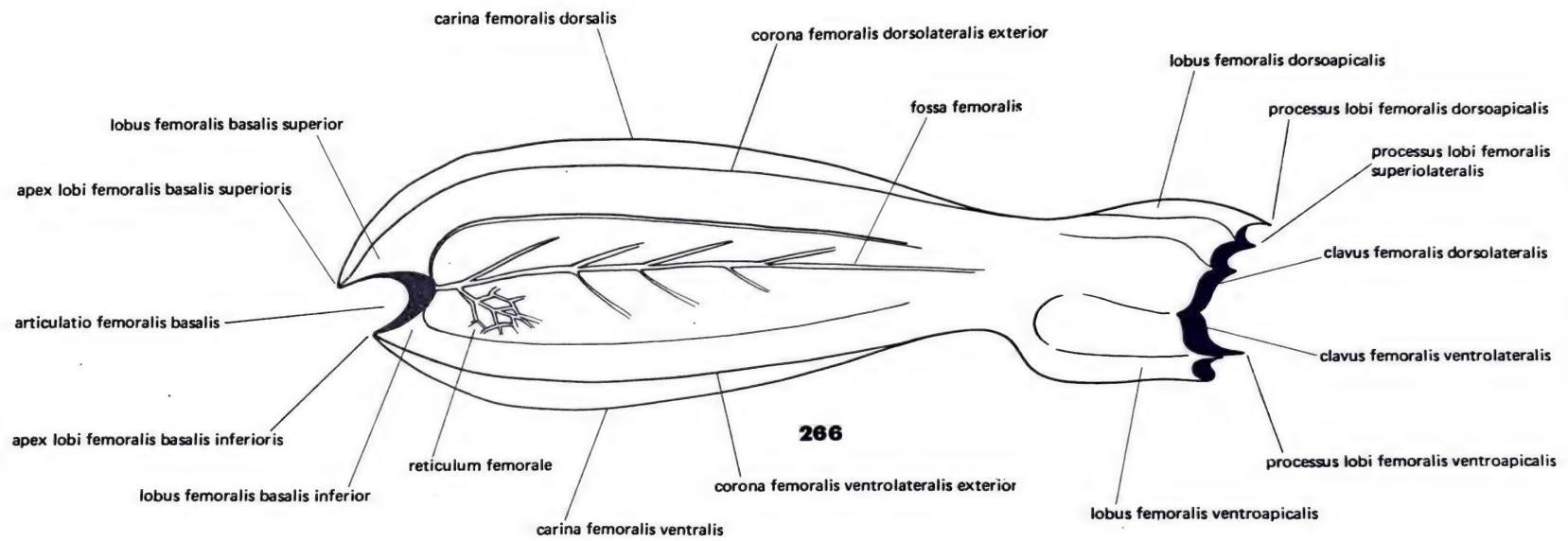
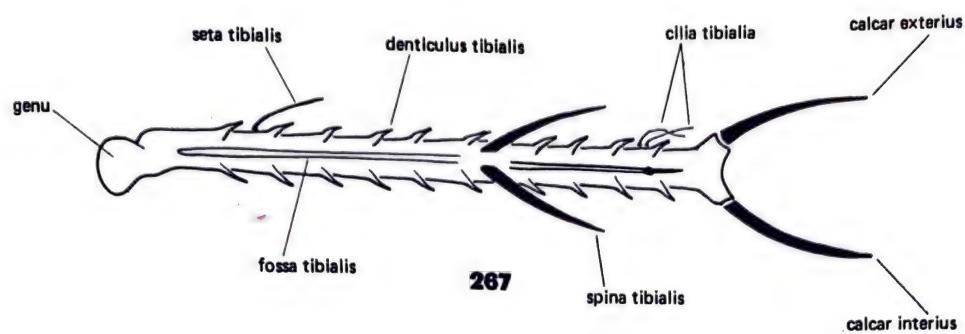
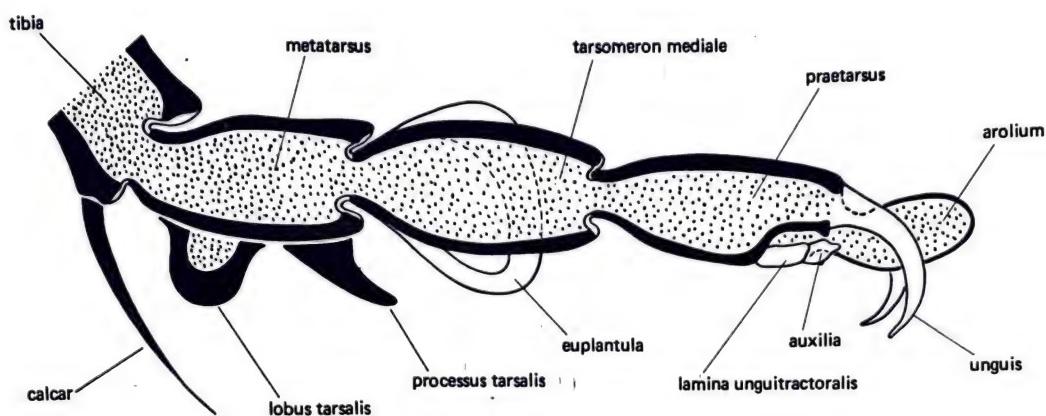


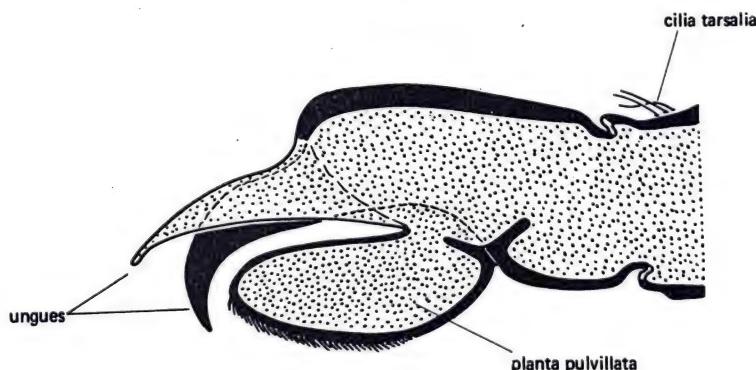
Fig. 266. The femur



267

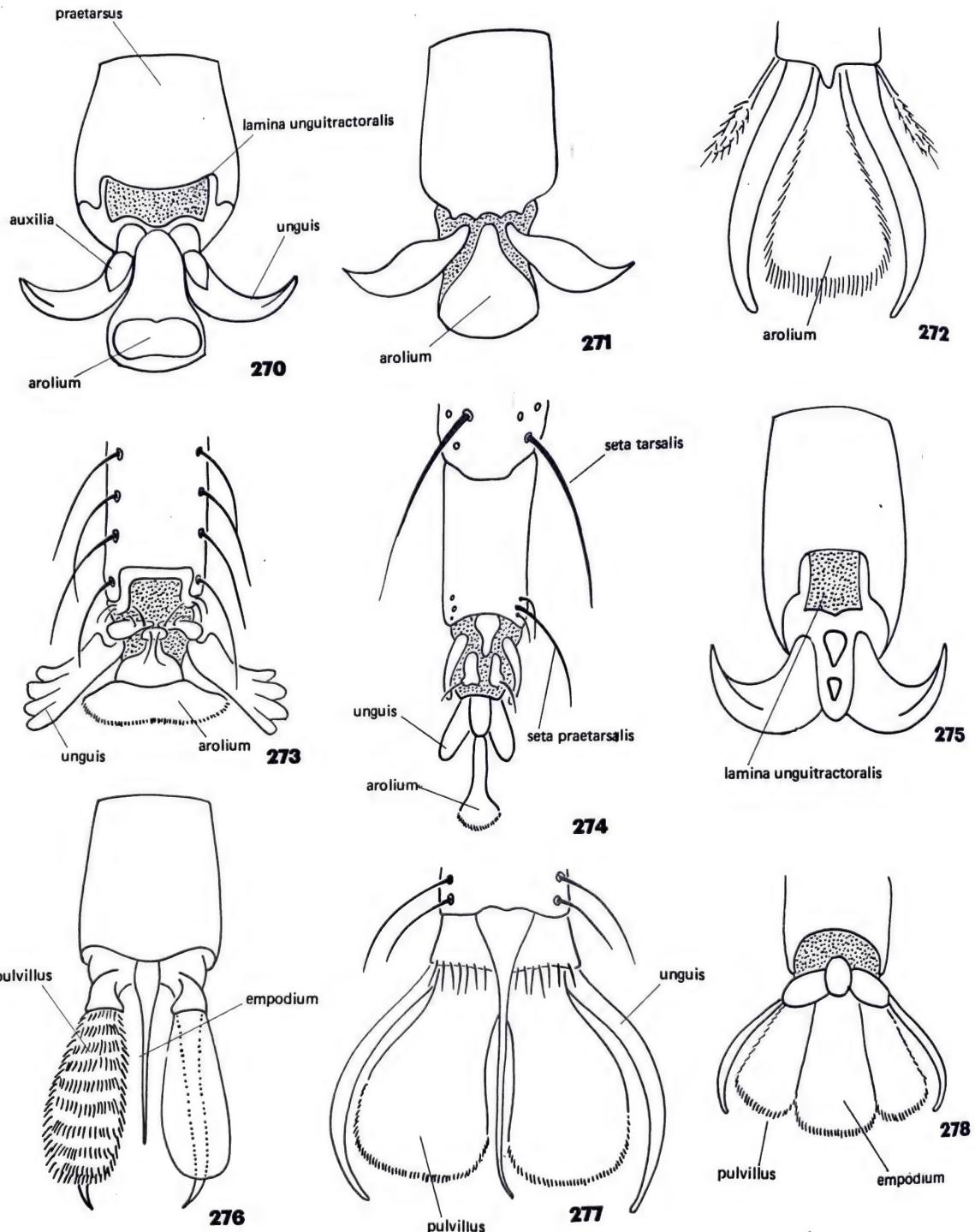


268

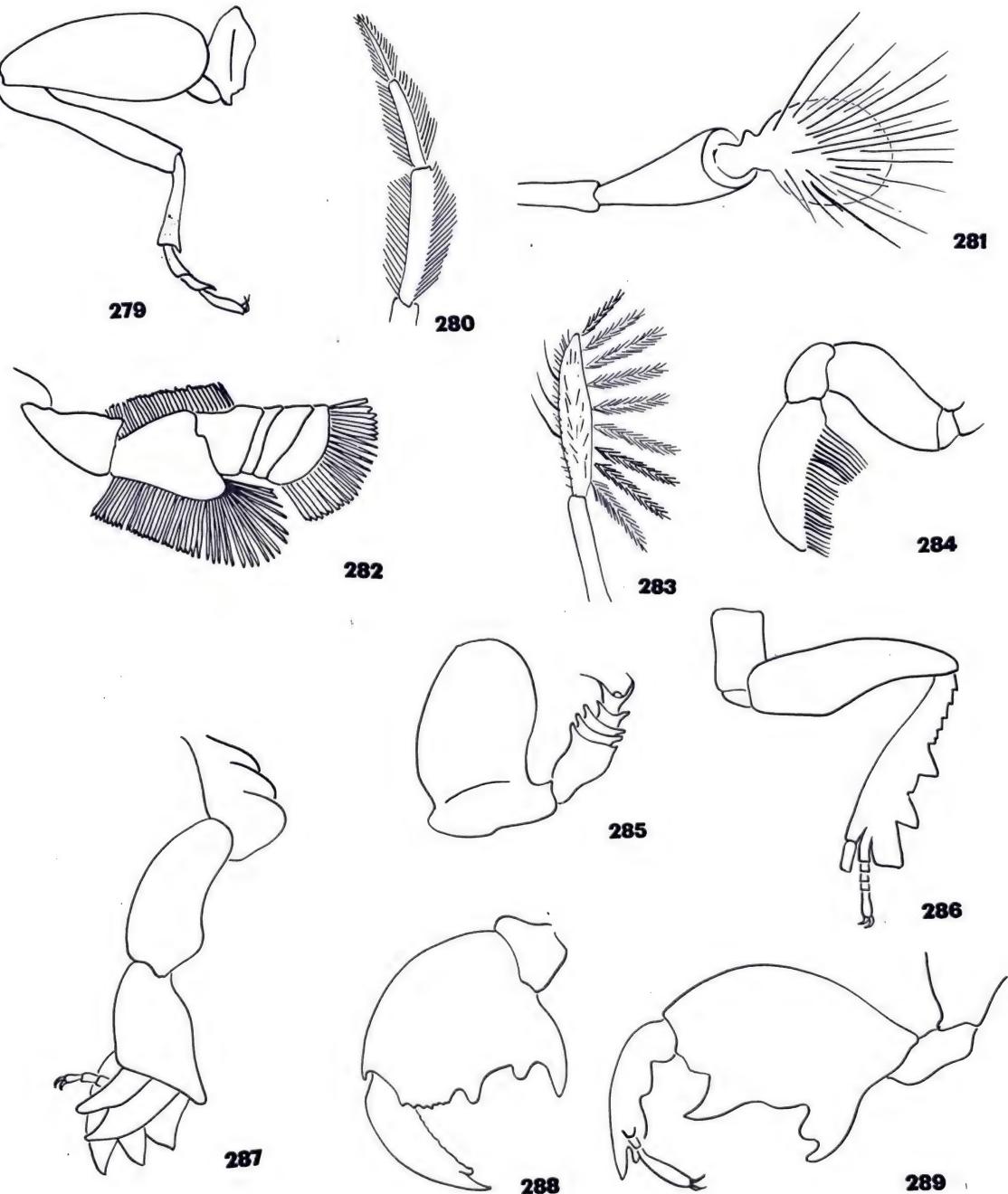


269

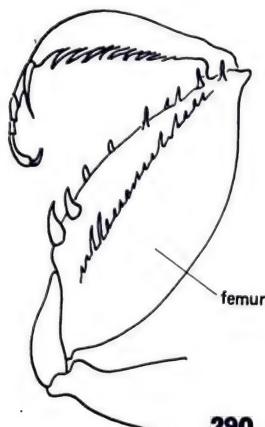
Fig. 267. The tibia. — 268: The tarsus. — 269: The last tarsal joint



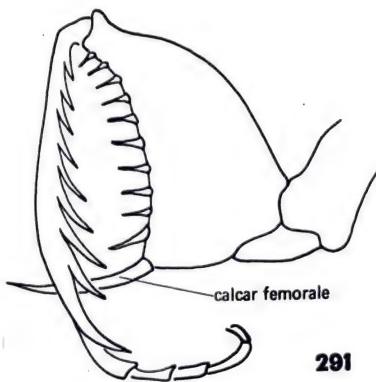
Figs. 270–278. Some more important types of the sole. — 270: *Periplaneta* (Blatt.) (ventral), and 271: same (dorsal), 272: *Cecidomyia* (Dipt.), 273: *Osmylus* (Neuropt.), 274: *Chrysopa* (Neuropt.), 275: *Magicicada* (Homopt.), 276: *Asilus* (Dipt.), 277: *Sarcophaga* (Dipt.), and 278: *Rhagio* (Dipt.) (after Snodgrass 270–271, 275–276, and Shvanich 272, 277–278)



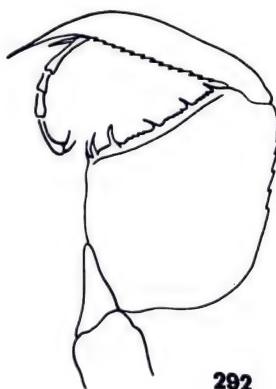
Figs. 279–289. Some important types of the leg. — 279: Walking leg (*Chrysomela*, Coleopt.), 280–284: swimming leg, 280: *Notonecta* (Heteropt.), 281: *Deuterophlebia* (Dipt.), 282: *Gyrinus* (Coleopt.), 283: *Rhagovelia* (Heteropt.), and 284: *Corixa* (Heteropt.). 285–289: Digging leg, 285: *Gryllotalpa* (Orthopt.), 286: *Vespa* (Hymenopt.), 287: *Canthon* (Coleopt.), 288: *Magicicada* (Homopt.) (frontal), and 289: same (lateral) (after Shvanvich 279–284, 289, and Snodgrass 285–288)



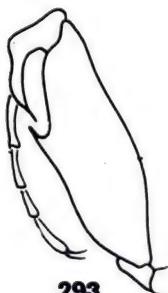
290



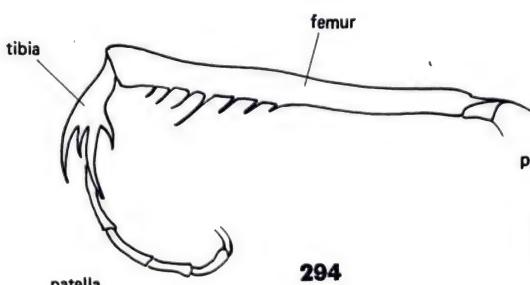
291



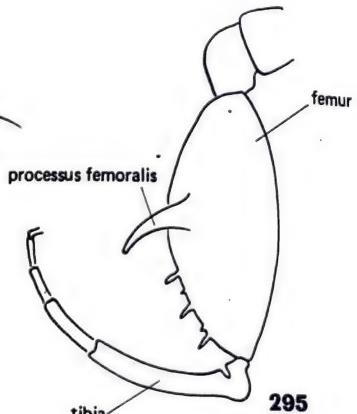
292



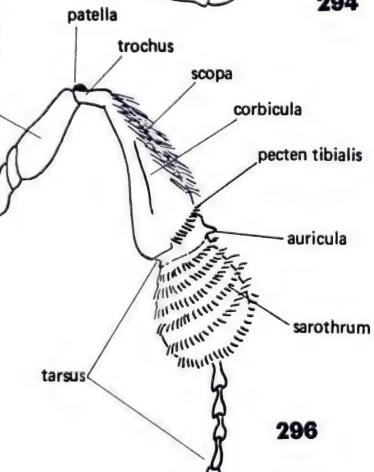
293



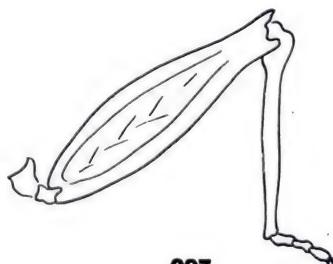
294



295

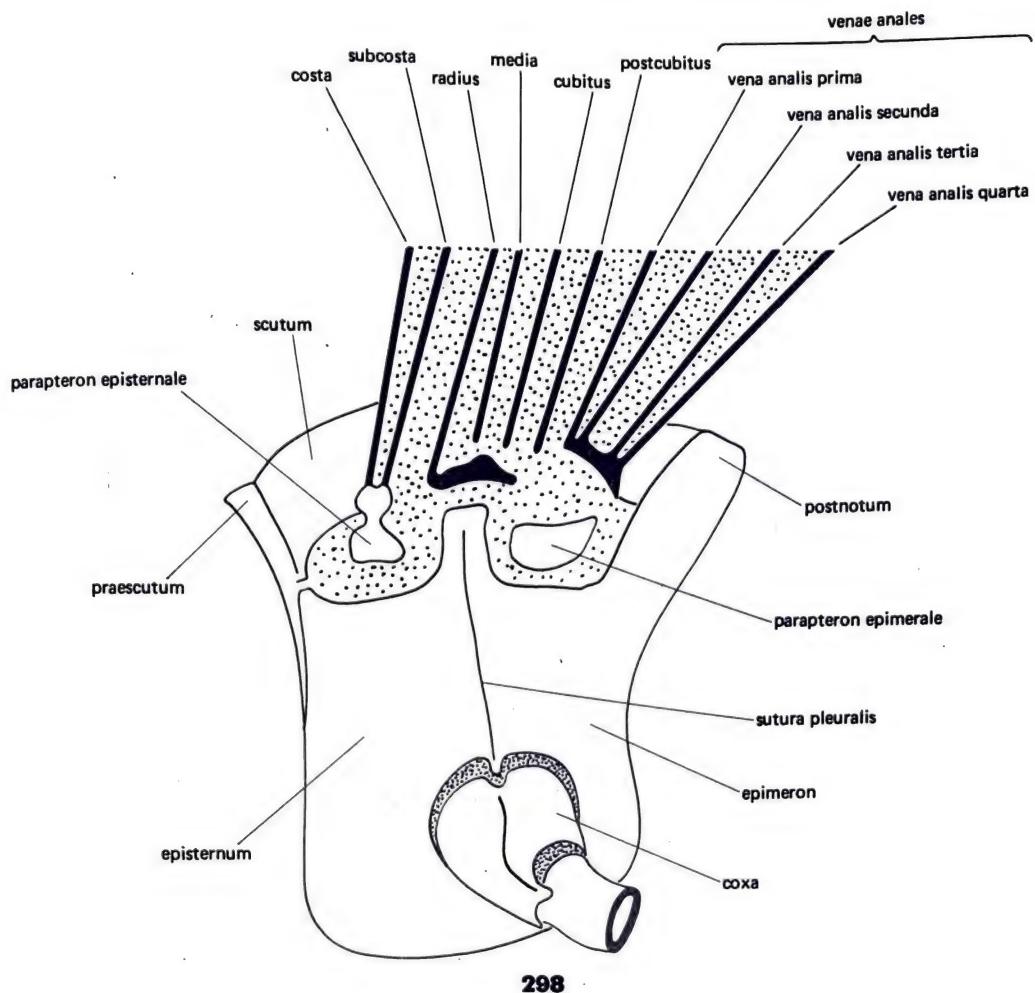


296



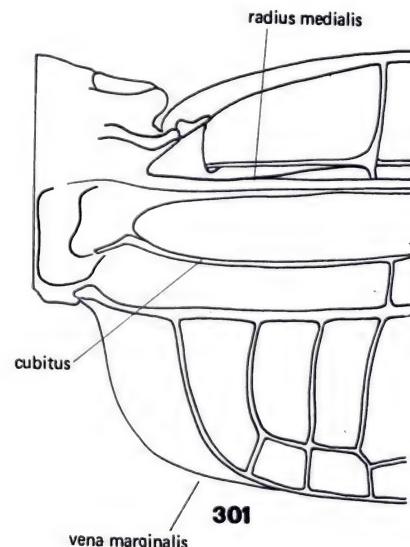
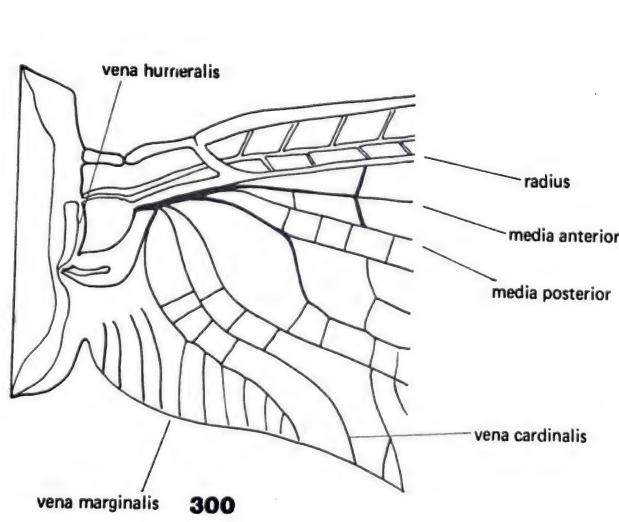
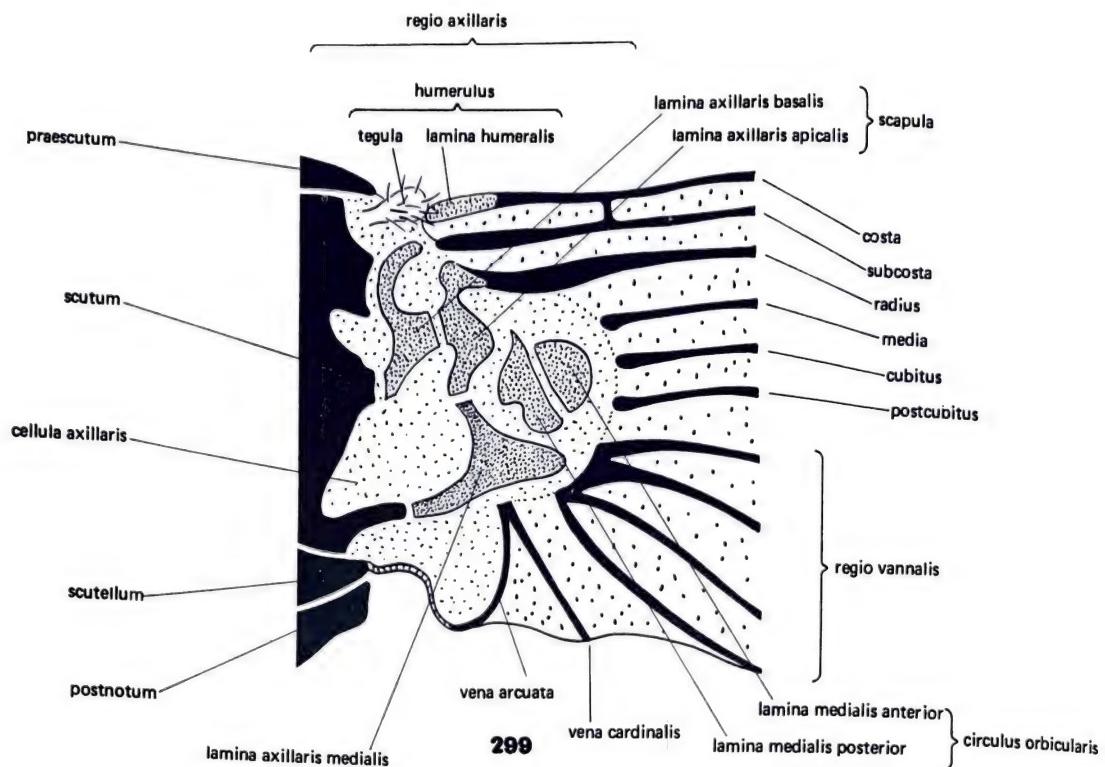
297

Figs. 290–297. Some important types of the leg. — 290–295: Predatory leg, 290: *Eremiaphilla* (Mant.), 291: *Metallytims* (Mant.). 292: *Acanthomantis* (Mant.). 293: *Amorphoscelis* (Mant.), 294: *Thespotia* (Mant.), and 295: *Mantispa* (Neuropt.). 296: Gathering leg (*Apis*, Hymenopt.). 297: Jumping leg (*Omocestus*, Orthopt.) (Beier 290–295, Shvanvich 296)

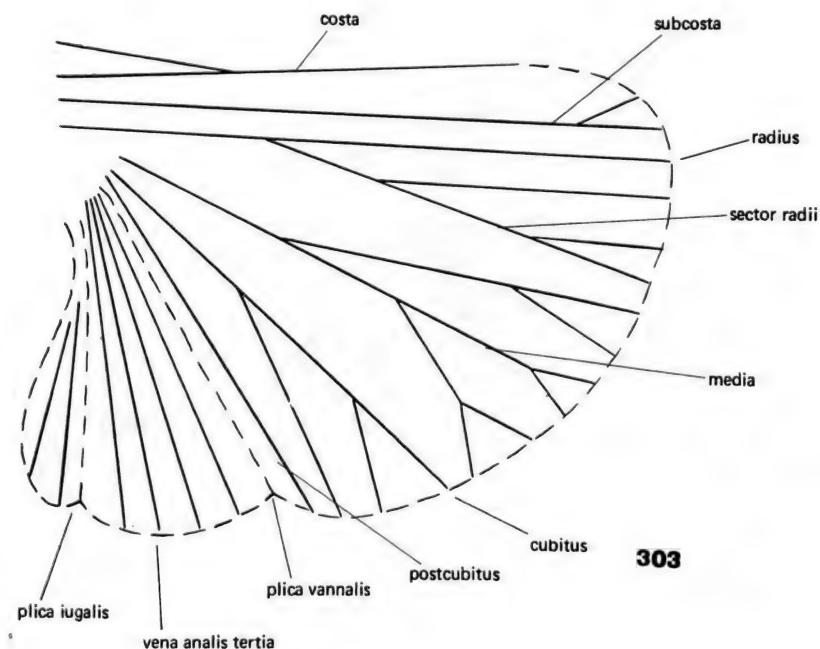
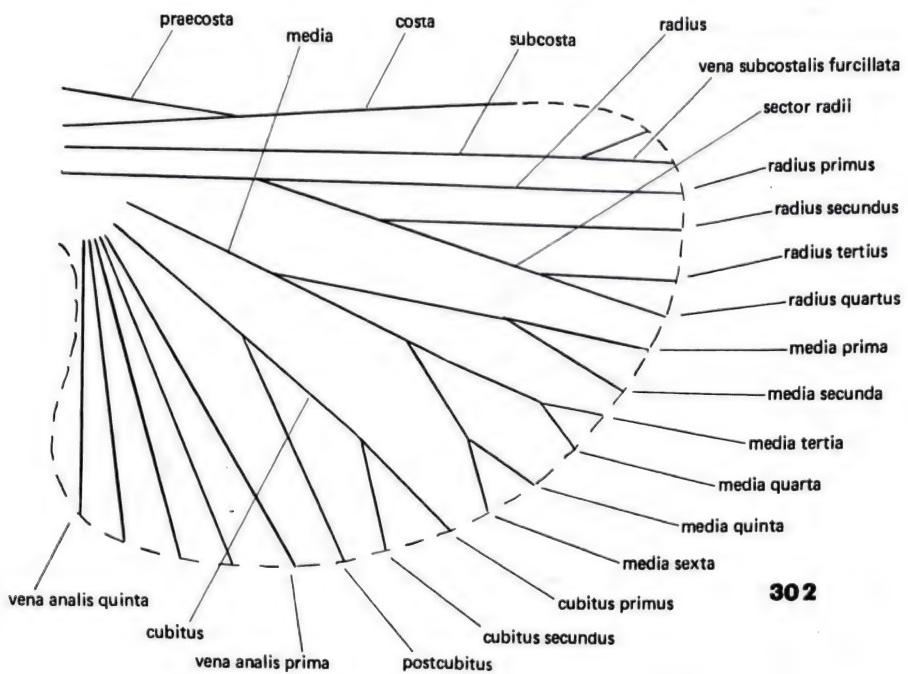


298

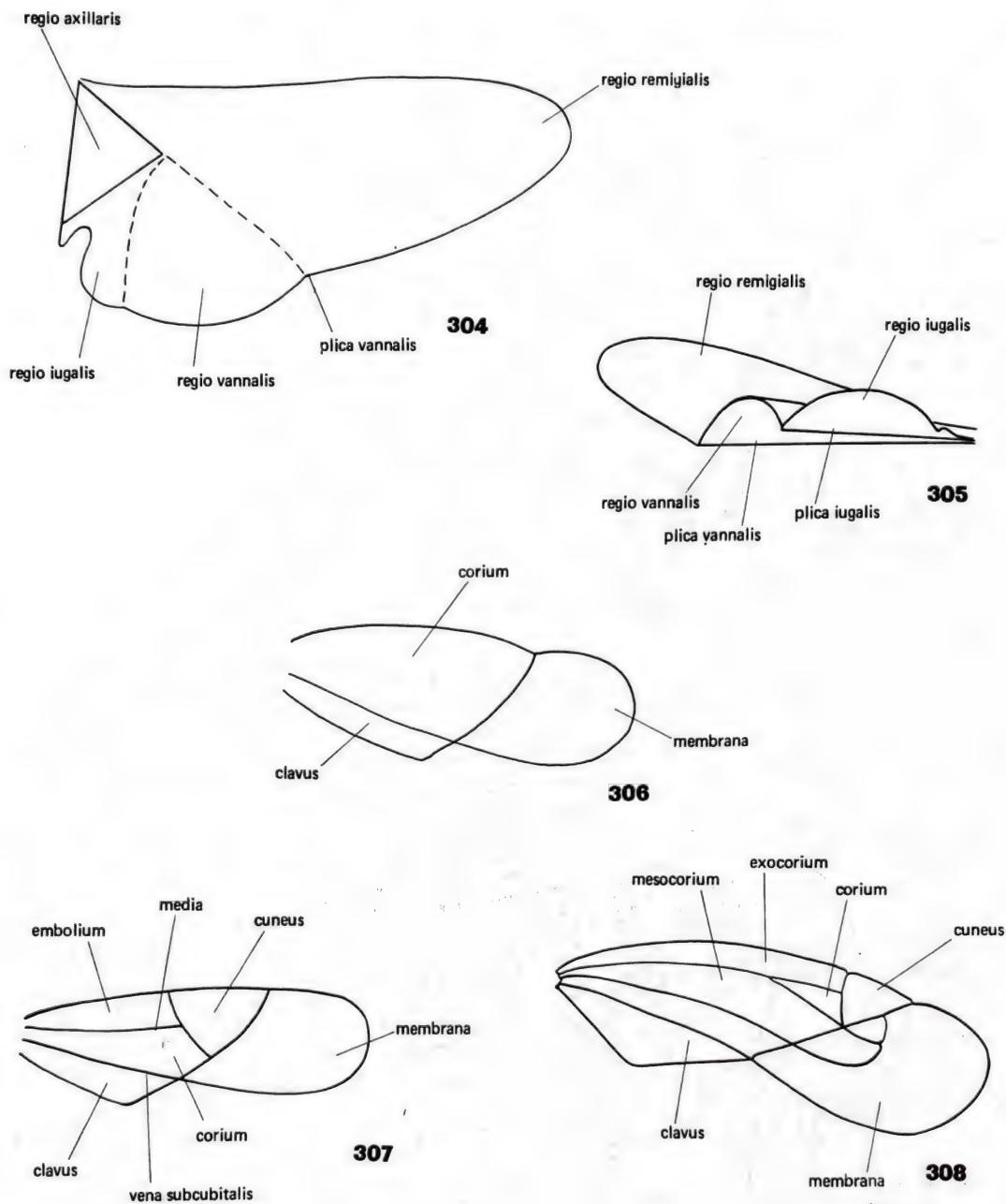
Fig. 298. Schematic drawing of the base of the wing with thoracic segment (in lateral view)



Figs. 299–301. Schematic drawing of the base of the wing. — 299: With the axillary region (*regio axillaris*). 300: Fore wing, and 301: hind wing (after Seidel and Eidmann 299, and Snodgrass 300–301)



Figs. 302–303. Schematic drawing to show wing venation. — 302: The fore wing, and 303: the hind wing



Figs. 304–308. The principal regions of the wing. — 304: The typical wing, 305: the folded wing. 306–308: The modified fore wing of the Heteroptera (hemelytron). 306: Lygaeid-type, 307: Anthocorid-type, and 308: Mirid-type (Weber 306–307), Snodgrass 304–305, and Stichel 308)

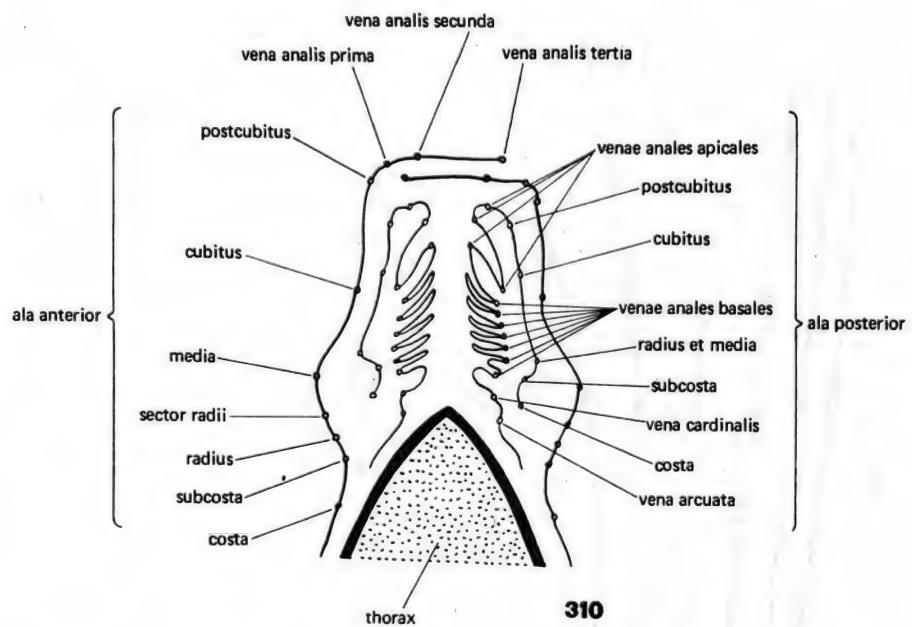
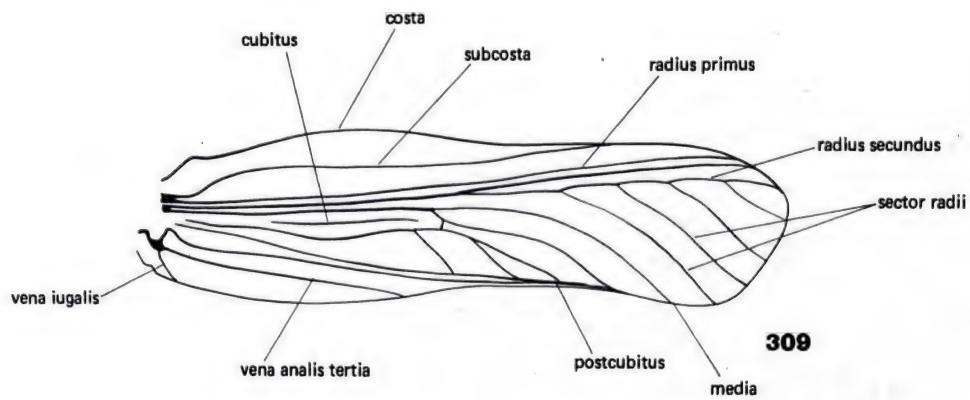


Fig. 309. The fore wing (tegmen) of the Orthoptera. — 310. Schematic drawing of the fore and hind wings of the Orthoptera in cross-section (after Snodgrass)

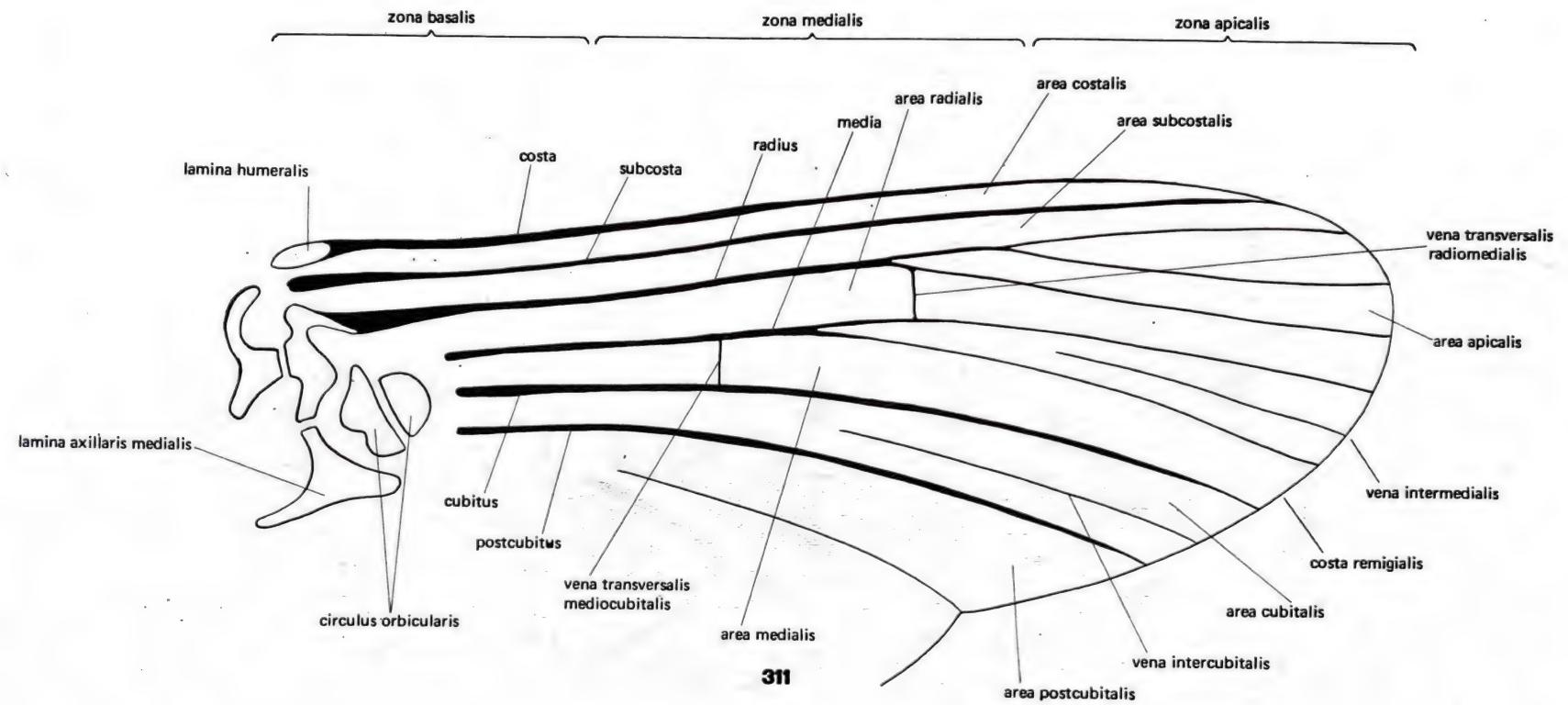


Fig. 311. The remigial region (regio remigialis)

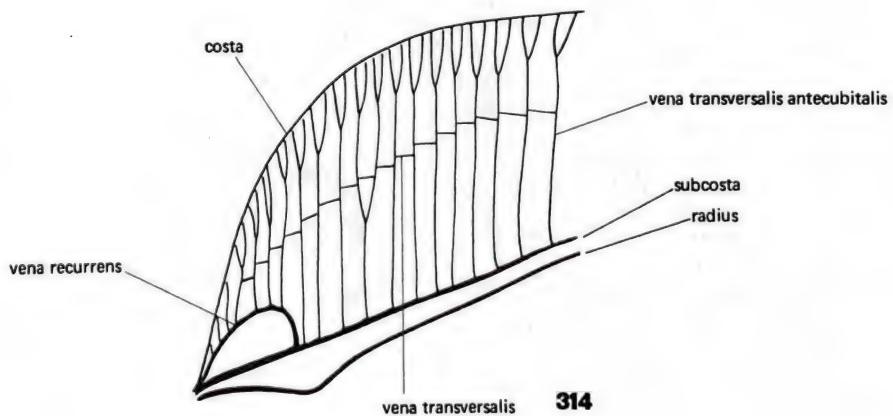
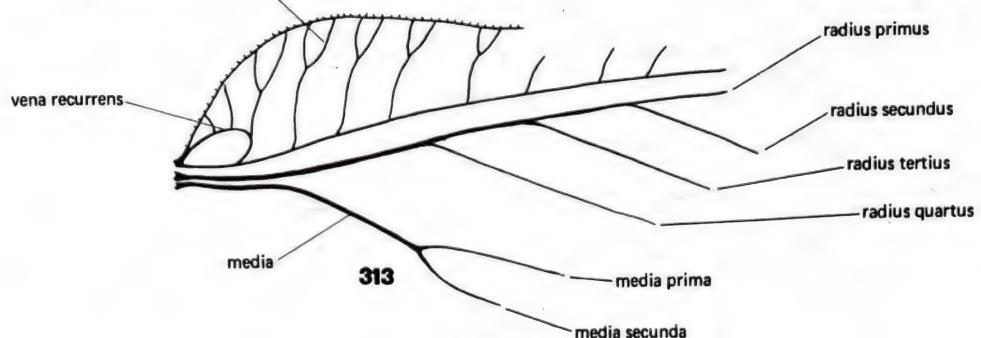
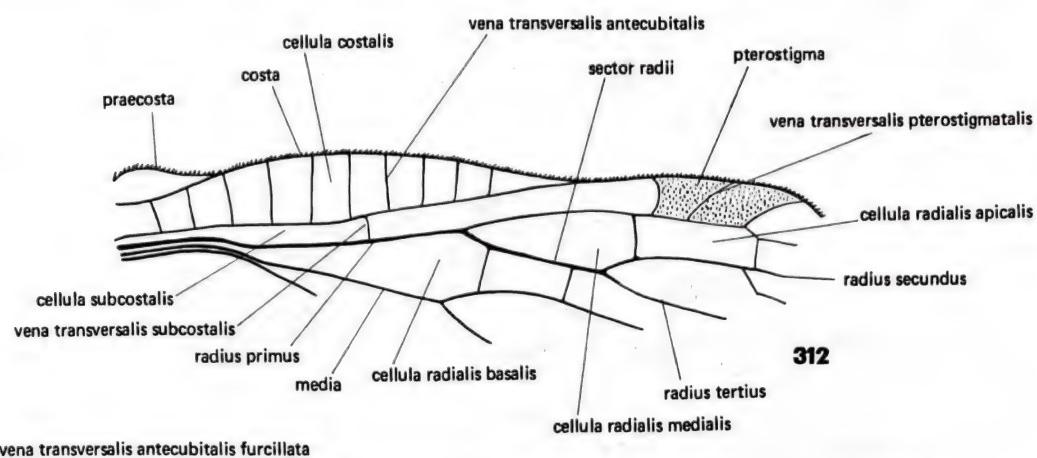


Fig. 312. The subcostal area (area subcostalis) of the Raphidia (Raphidiopt.) — 313. The radial area (area radialis) of the Megalomus (Neuropt.). — 314. The costal area (area costalis) of the Drepanopteryx (Neuropt.).

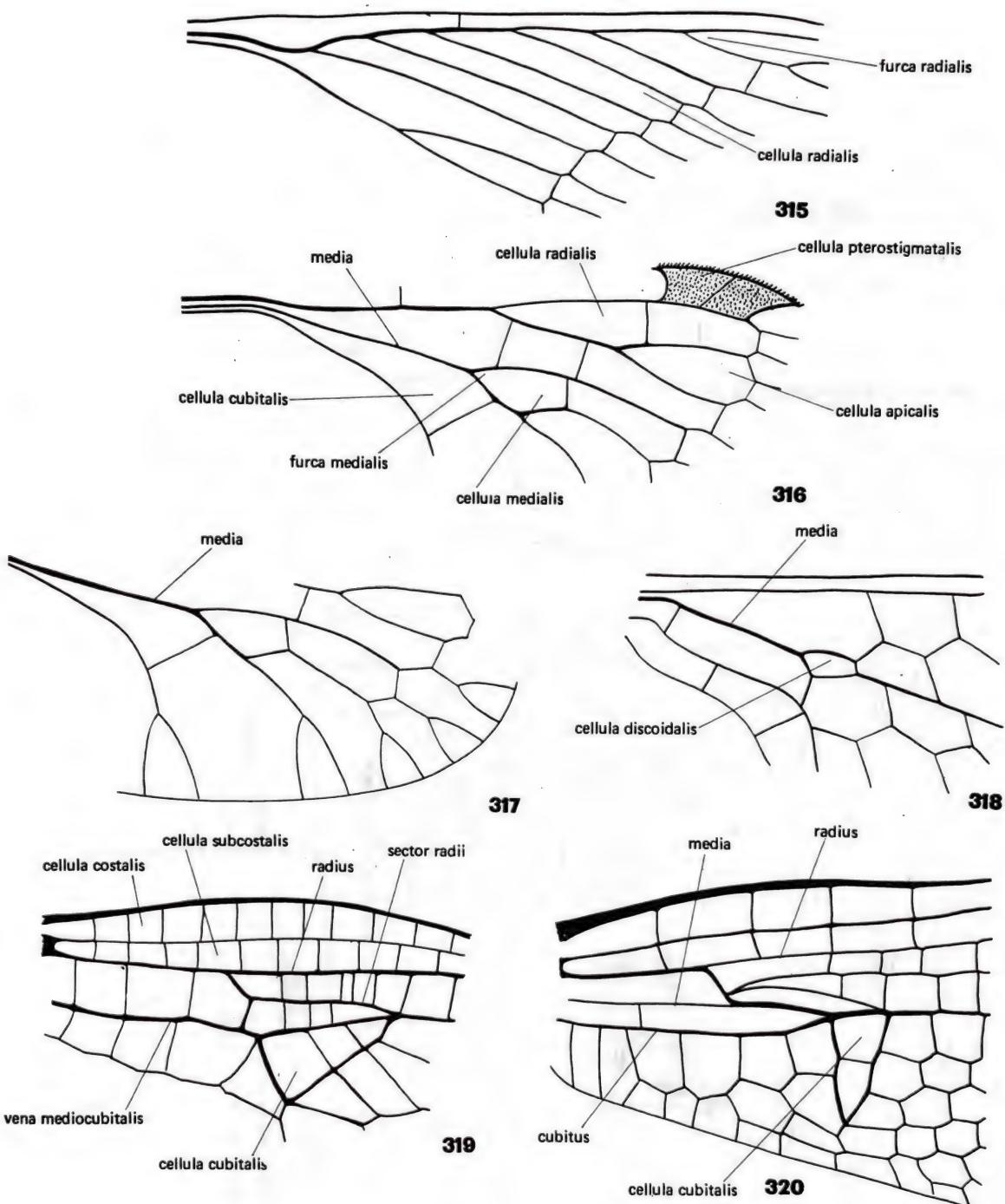
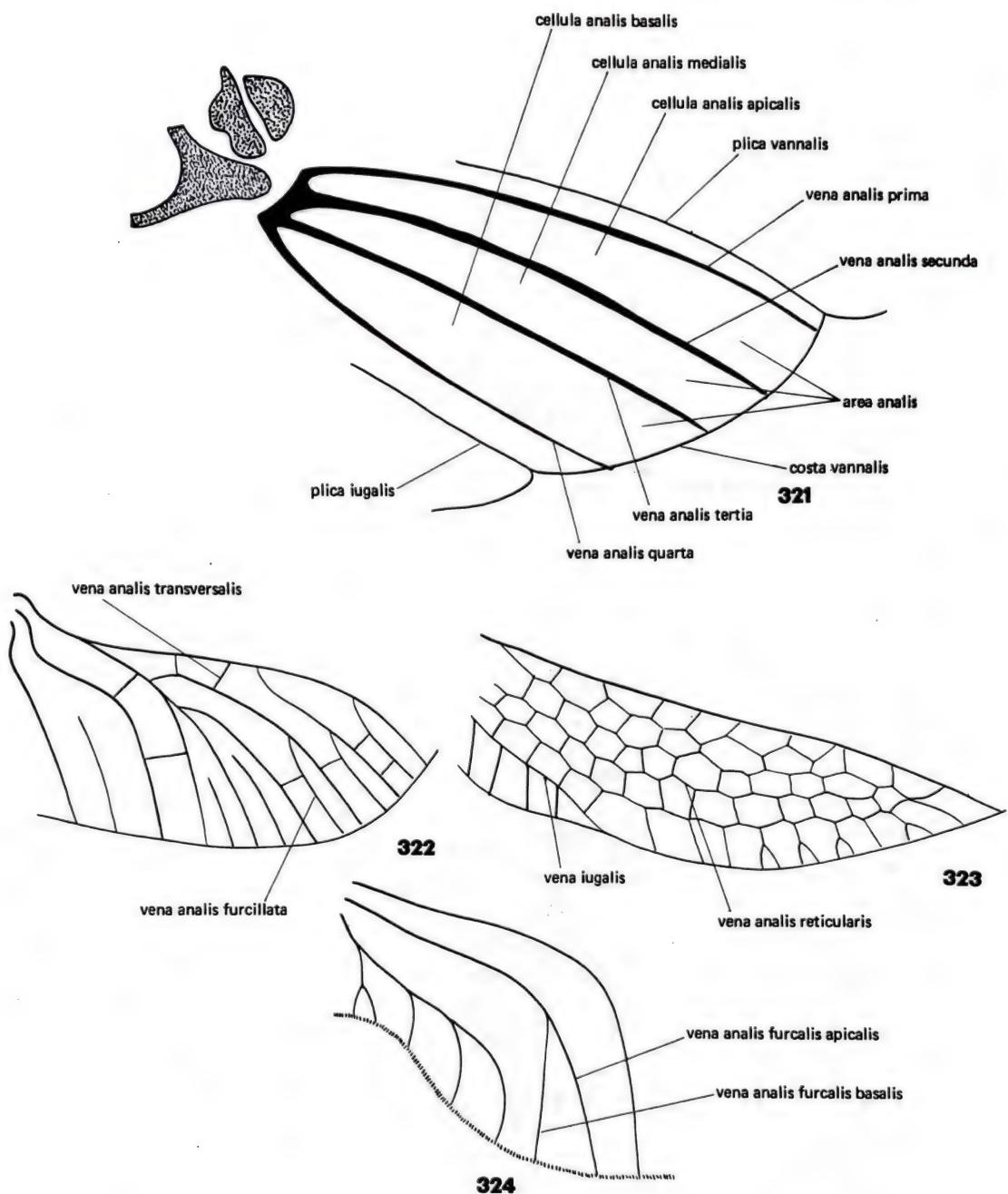
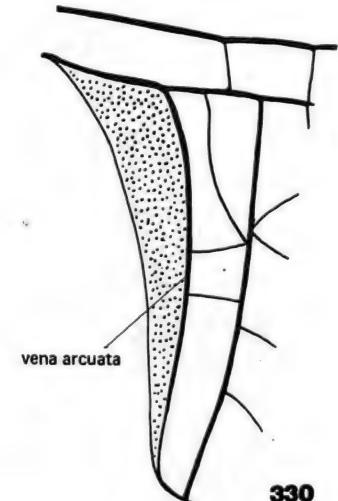
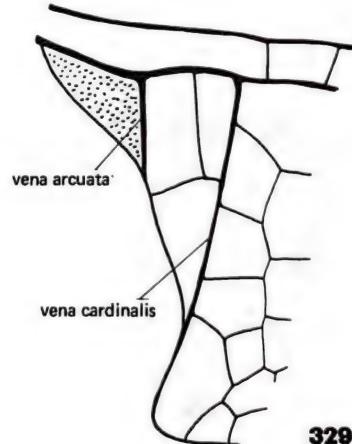
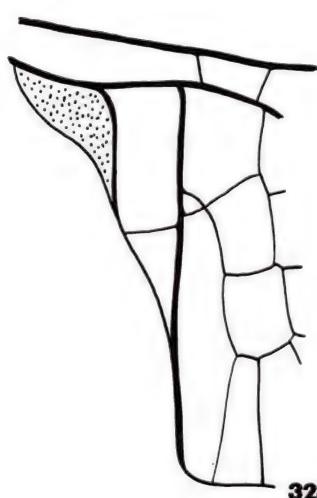
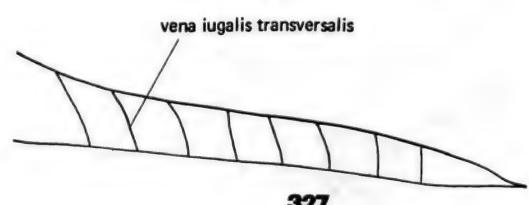
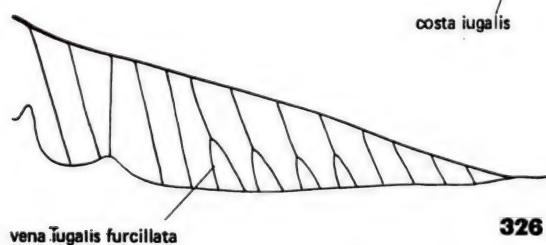
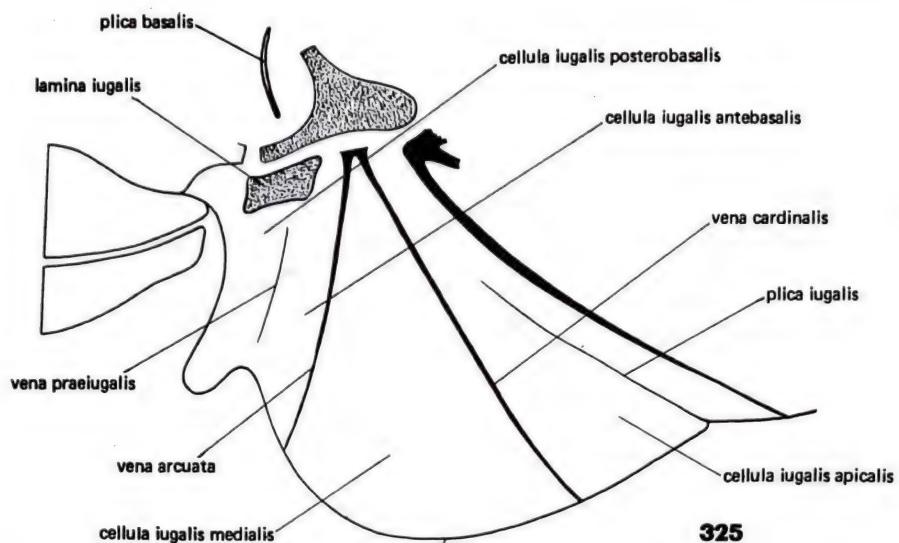


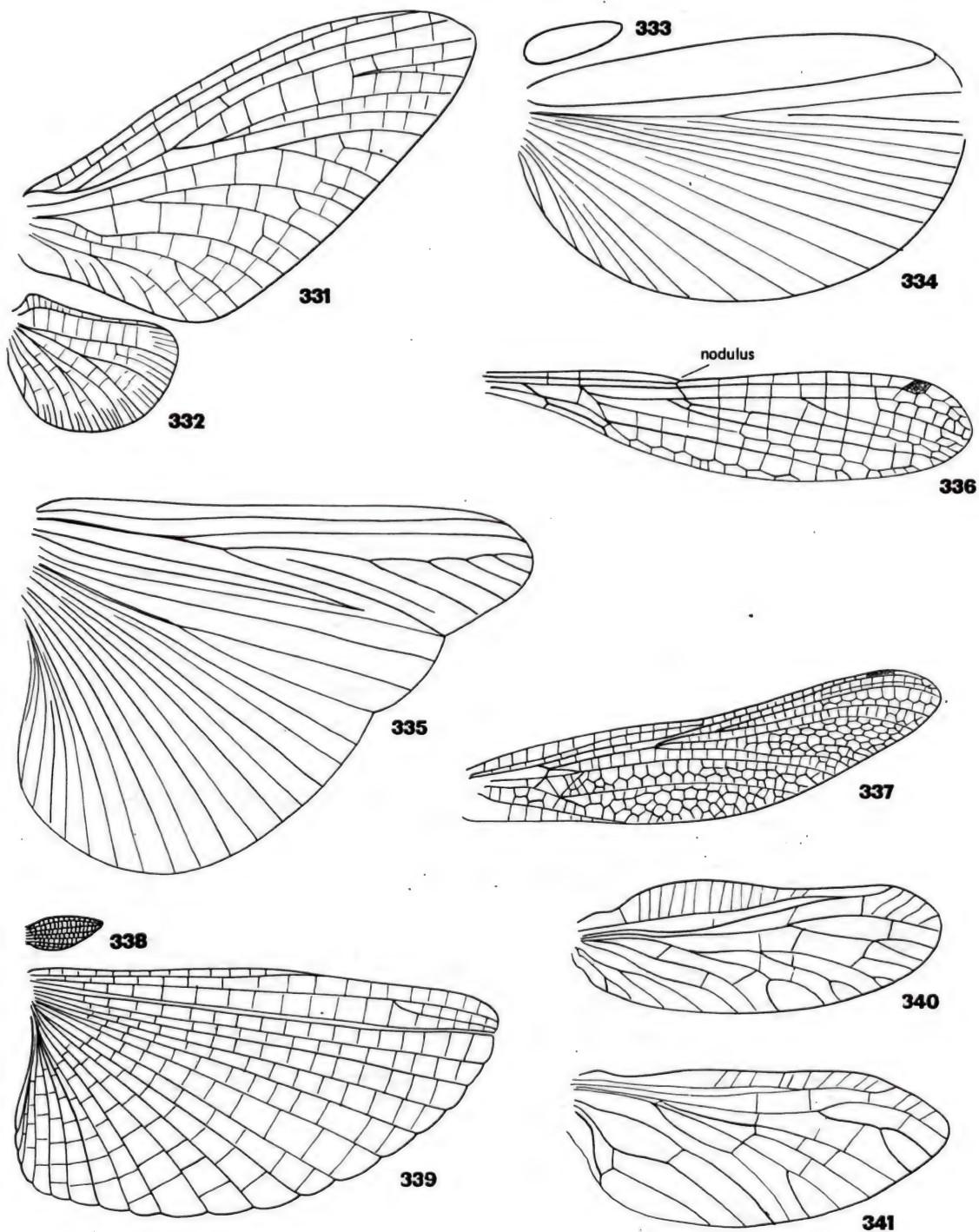
Fig. 315. The radial area (area radialis) of the *Megalomus* (Neuropt.). — 316. The median area (area medialis) of the *Agulla* (Raphidiopt.). — 317. The cubital area (area cubitalis) of the *Raphidia* (Raphidiopt.). — 318. The discoidal area (area discoidalis) of the *Chrysopa* (Neuropt.). — 319. The mediocubital area (area mediocubitalis) of the *Aeshna* (Odon.). — 320. The medioradial area (area medioradialis) of the *Libellula* (Odon.).



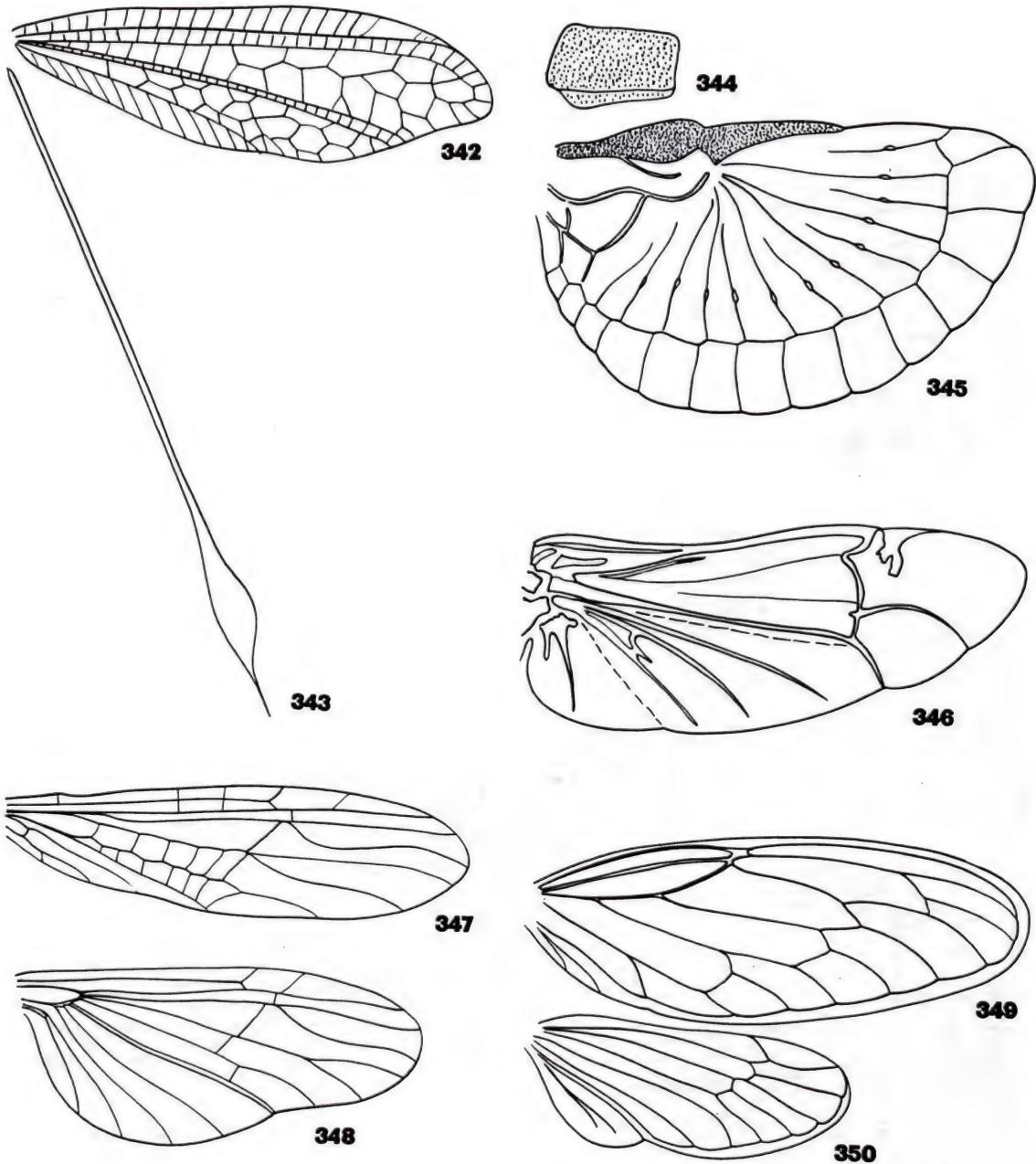
Figs. 321–324. The vannal region (*regio vannalis*). — 321: Schematically. 322–324: three types. 322: *Palingenia* (Ephemeropt.), 323: *Osmylus* (Neuropt.), and 324: *Chrysopa* (Neuropt.).



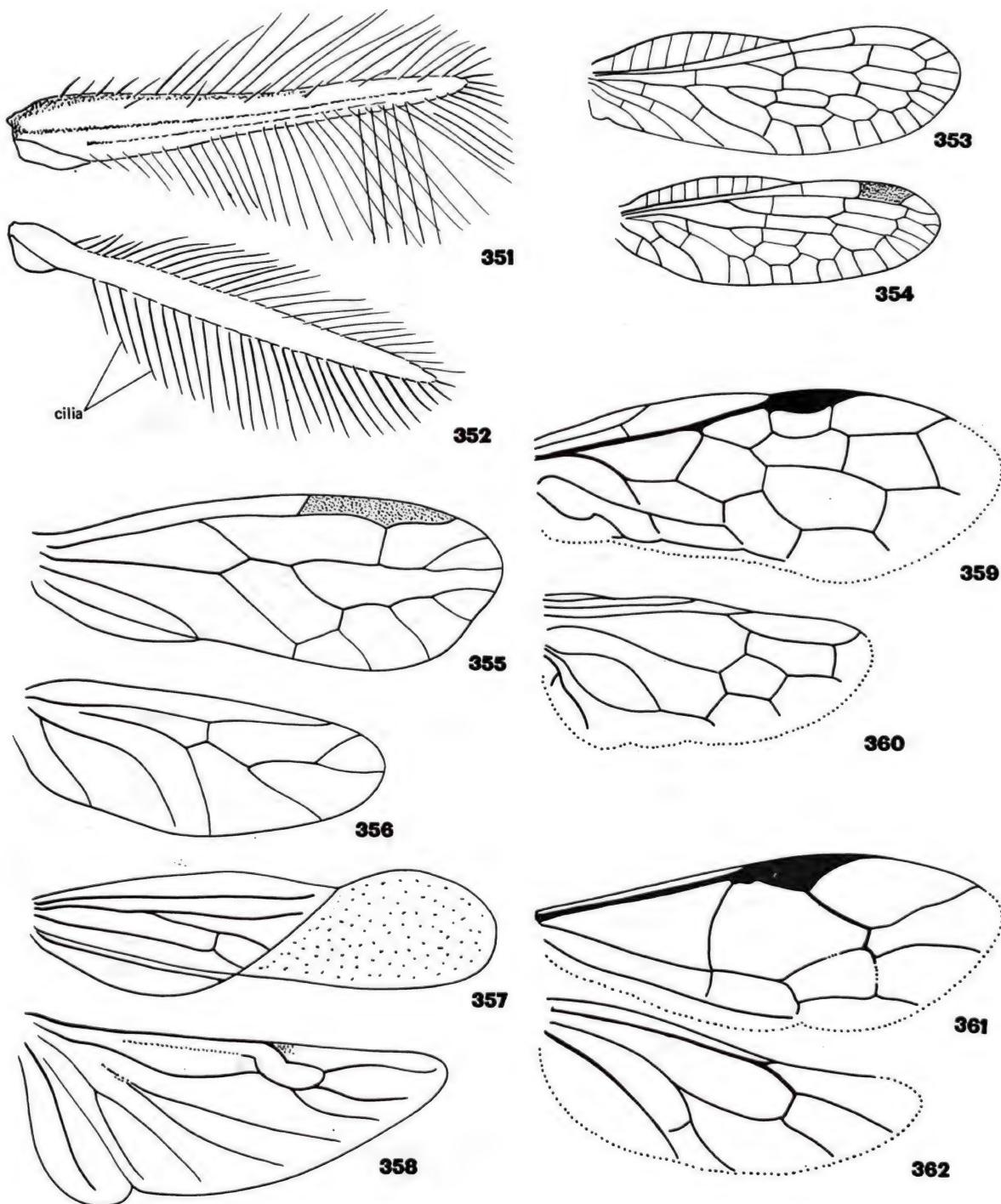
Figs. 325–330. The jugal region (regio iugalis). — 325: Schematically, 326–330: five types, 326: *Drepanopteryx* (Neuropt.), 327: *Myrmeleon* (Neuropt.), 328: *Orthetrum* (Odon.), 329: *Aeshna* (Odon.), and 330: *Anaciaeshna* (Odon.)



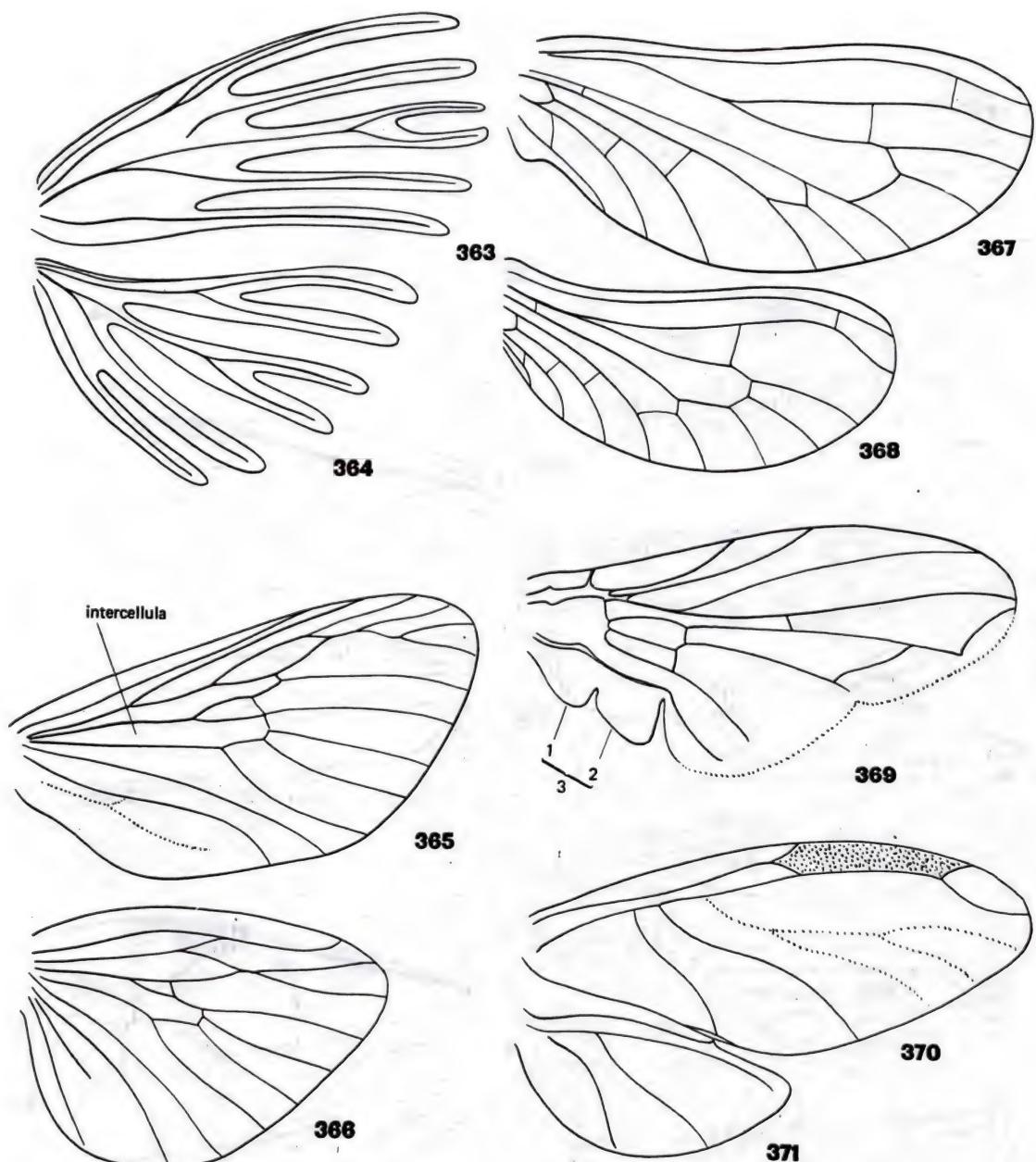
Figs. 331–341. Characteristic types of some insect wings. — 331–332: *Oligoneuriella* (Ephemeropt.), 331: fore, and 332: hind, 333–334: *Palophus* (Phasmopt.), 333: fore, and 334: hind, 335: hind wing of *Dissosteira* (Orthopt.), 336: fore wing of *Coenagrion* (Odon.), 337: fore wing of *Austropetalia* (Odon.), 338–339: *Tetrix* (Orthopt.), 338: fore, and 339: hind, 340–341: *Sialis* (Megalopt.) 340: fore, and 341: hind



Figs. 342–350. Characteristic types of some insect wings. — 342–343: Nemoptera (Neuropt.), 342: fore, and 343: hind, 344–345: Forficula (Dermapt.), 344: fore, and 345: hind, 346: hind wing of *Melolontha* (Coleopt.), 347–348: *Nemoura* (Plecopt.) 347: fore, and 348: hind, 349–350: Cicada (Homopt.), 349: fore, and 350: hind (after Weber 349–350)



Figs. 351–362. Characteristic types of some insect wings. — 351–352: Thrips (Thysanopt.), 351: fore, and 352: hind, 353–354: Raphidia (Raphidiopt.). 353: fore, and 354: hind 355–356: Psocus (Psocopt.), 355: fore, and 356: hind, 357–358: Corixa (Heteropt.), 357: fore, and 358: hind, 359–360: Pamphilus (Hymenopt.), 359: fore, and 360: hind, 361–362: Ichneumon (Hymenopt.), 361: fore, and 362: hind



- 1 lobus axillaris interior  
 2 lobus axillaris exterior  
 3 alula

Figs. 363–371. Characteristic types of some insect wings. — 363–364: *Orneodes* (Lepidopt.), 363: fore, and 364: hind, 265–266: *Pieris* (Lepidopt.), 365: fore, and 366: hind, 367–368: *Coniopteryx* (Neuropt.), 367: fore, and 368: hind, 369: fore wing of *Musca* (Dipt.), 370–371: *Aphis* (Homopt.), 370: fore, and 371: hind (after Mihályi 369, and Szelegiewicz 370, 371)

# THE ABDOMEN

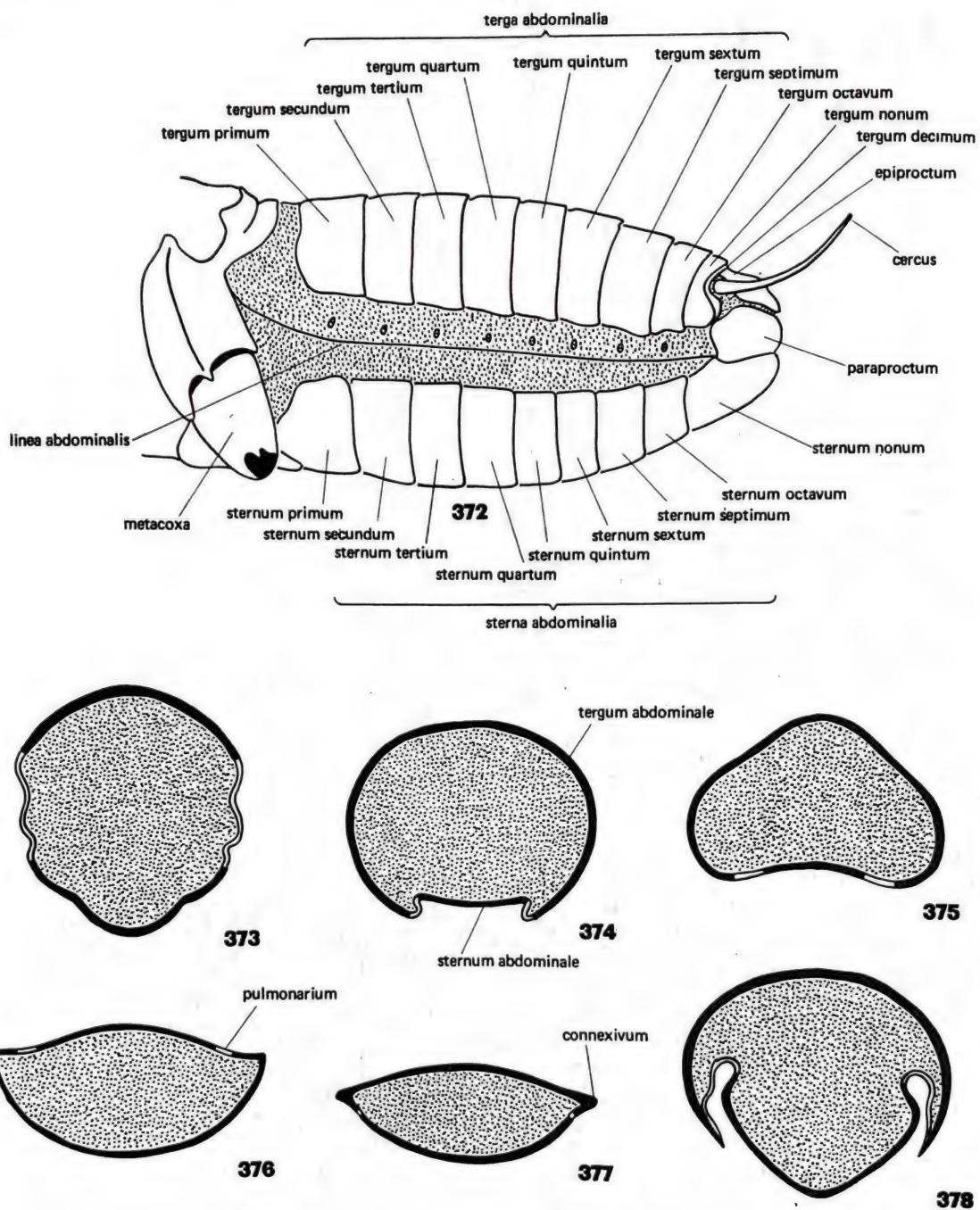
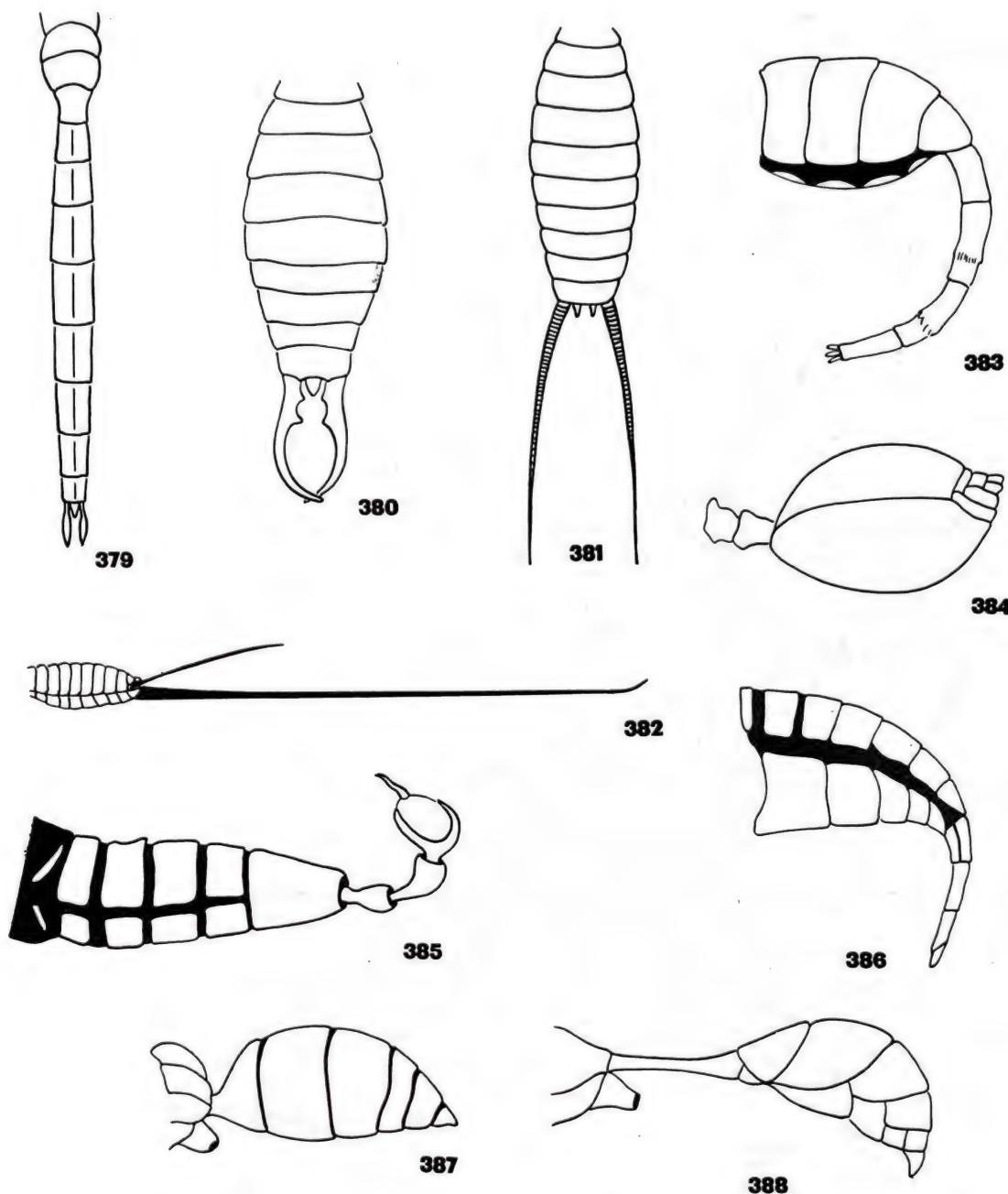
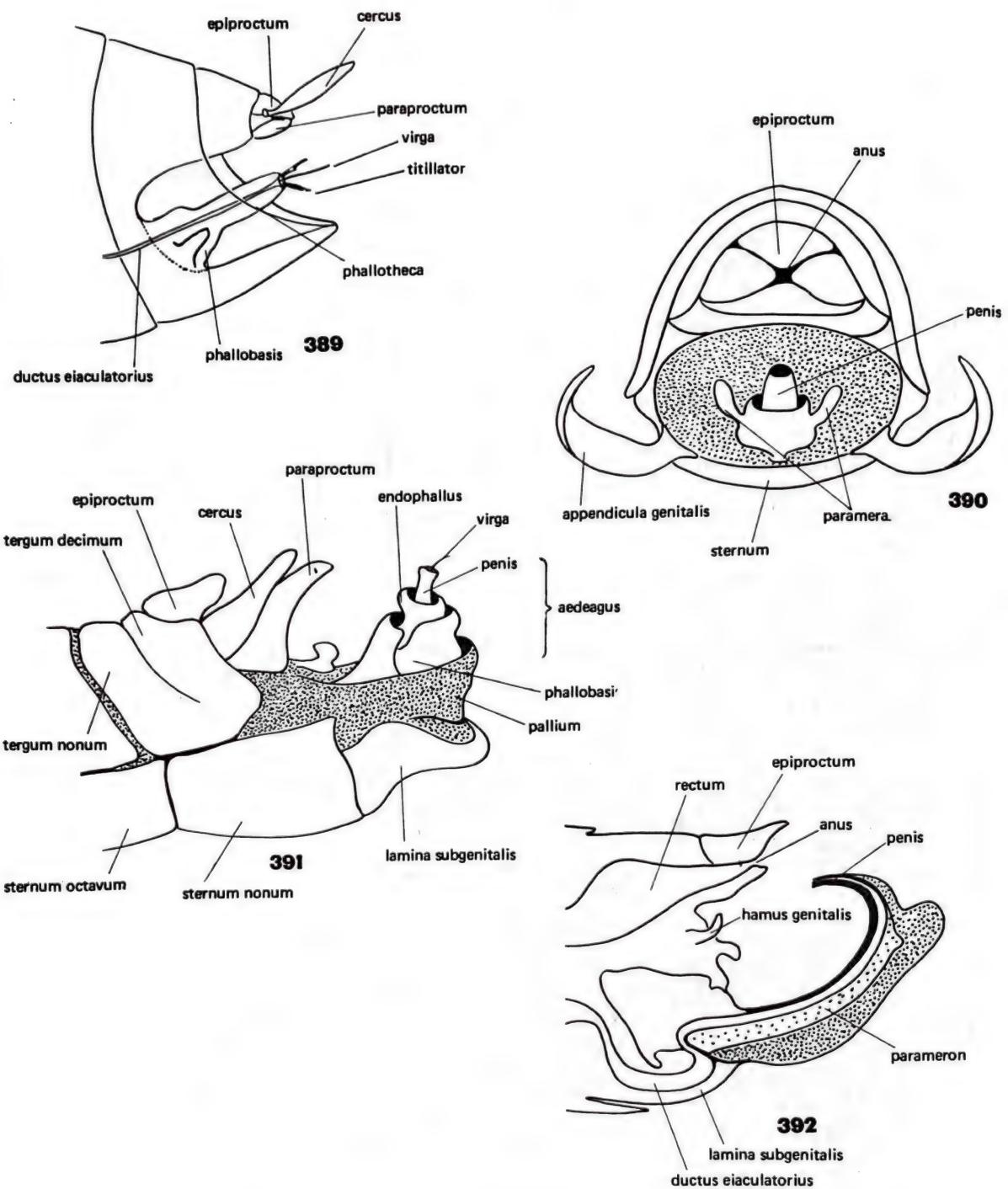


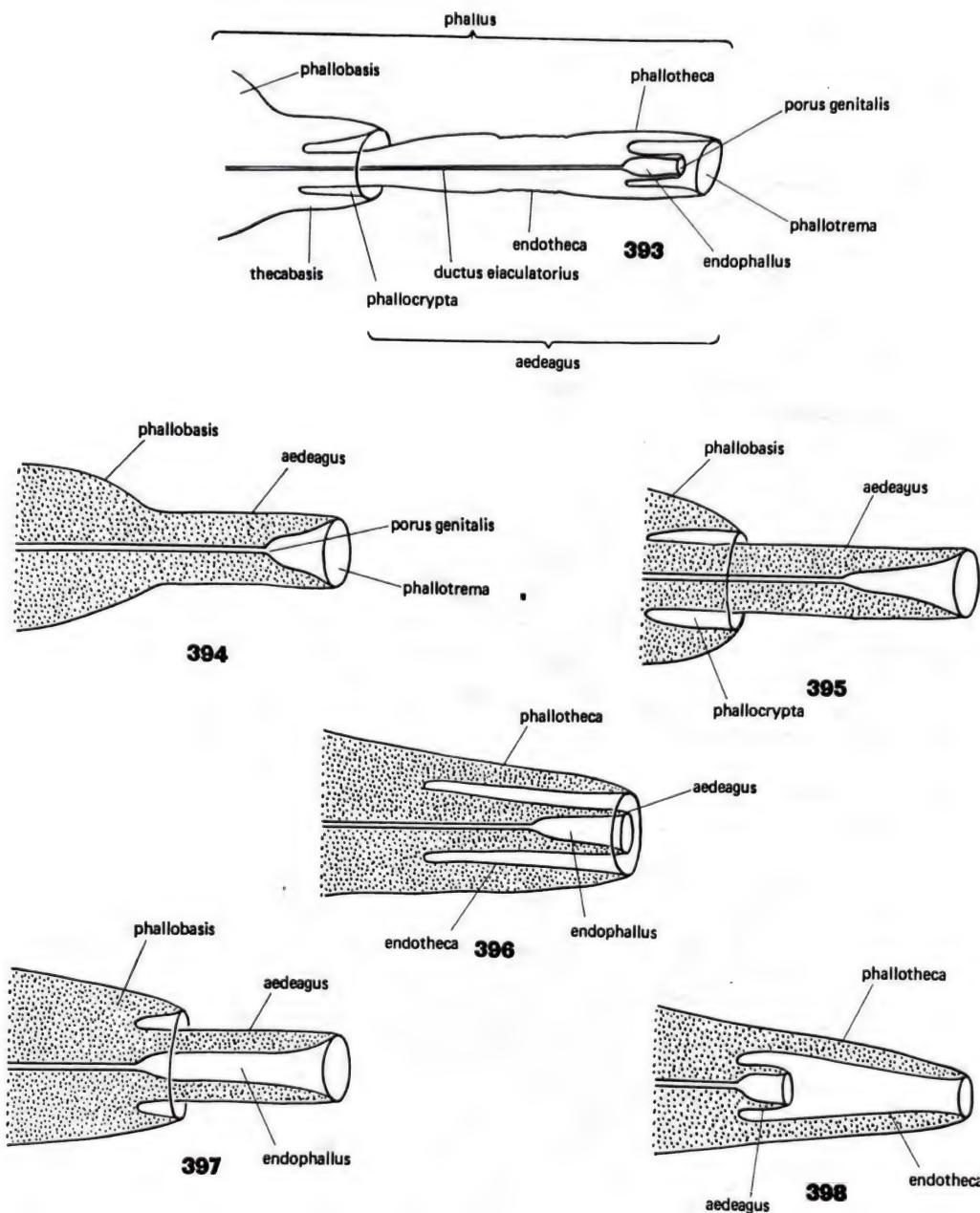
Fig. 372. Schematic drawing of the insect abdomen. — Figs. 373—378. Some more important types of insect abdomen in cross-section, 373: Orthoptera, 374: Odonata, 375: Diptera, 376: Coleoptera, 377: Heteroptera, and 378: Hymenoptera (after Shvanvich)



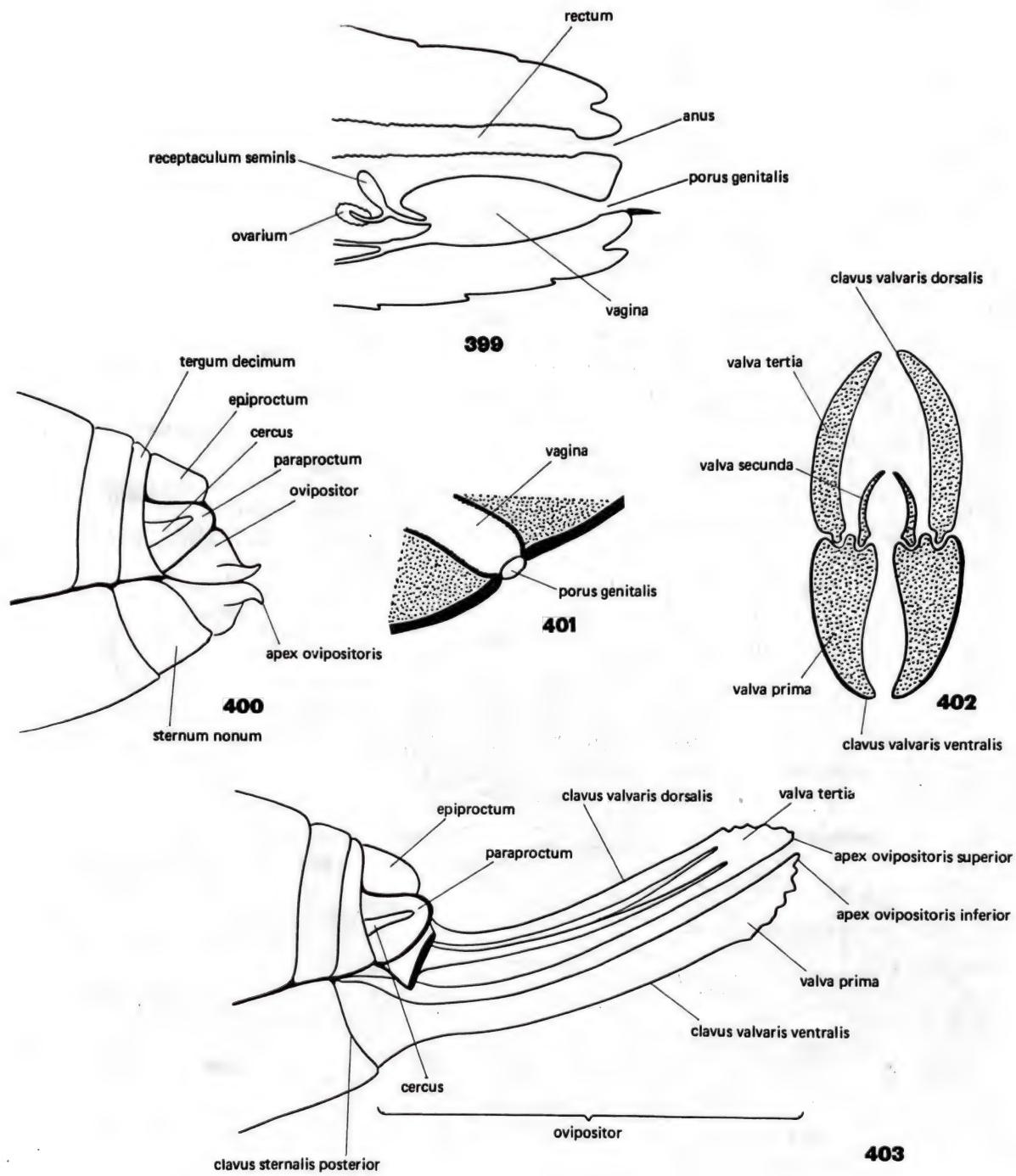
Figs. 379–388. Some types of insect abdomen. — 379: *Anax* (Odon.), 380: *Forficula* (Dermapt.), 381: *Nemoura* (Plecopt.), 382: *Ephemera* (Ephemeropt.), 383: *Musca* (Dipt.), 384: *Cryptocerus* (Hymenopt.), 385: *Panorpa* (Mecopt.), 386: *Cerambyx* (Coleopt.), 387: *Scolia* (Hymenopt.), and 388: *Sceliphron* (Hymenopt.) (after Shvanvich 382–384, 386–388)



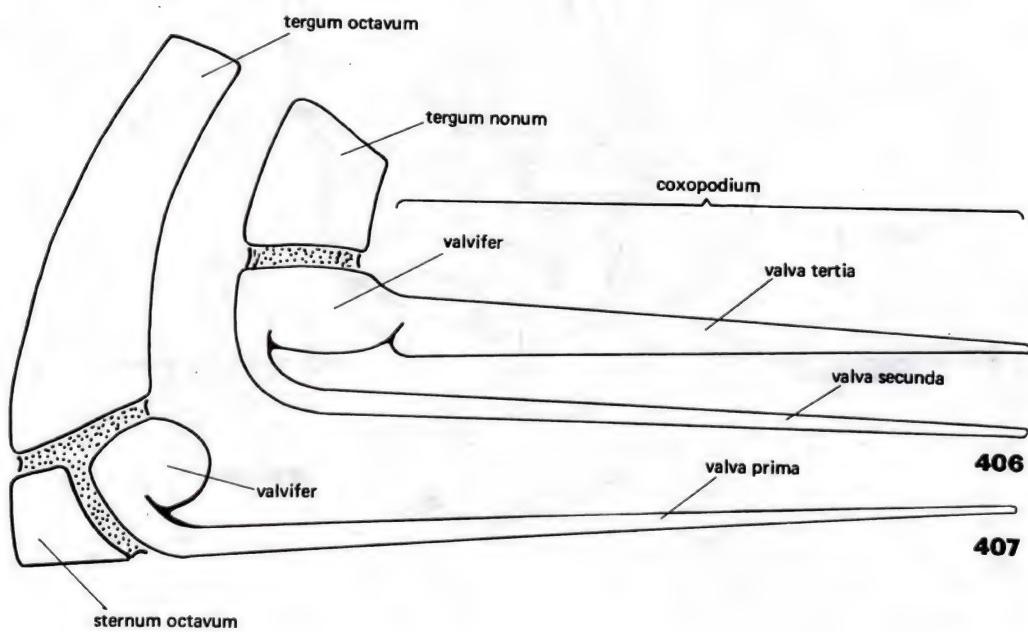
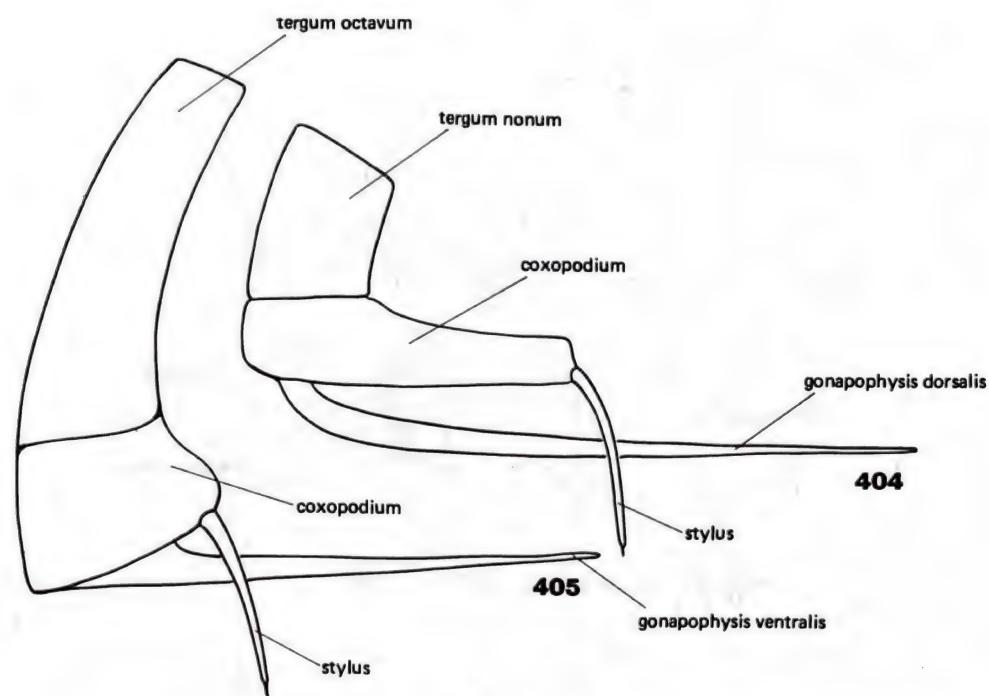
Figs. 389—392. Schematic view of the male genital apparatus. — 389: End of abdomen in longitudinal section, 390: end of abdomen in posterior view, 391: a primitive form of male genitals, and 392: a more advanced form the same (after Snodgrass 389, 390, and Shvanich 39<sup>1</sup> 392)



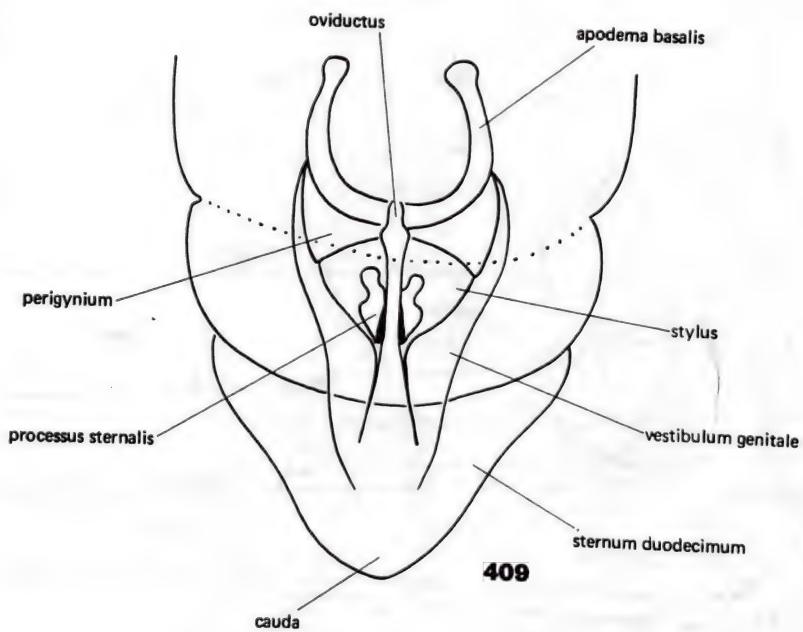
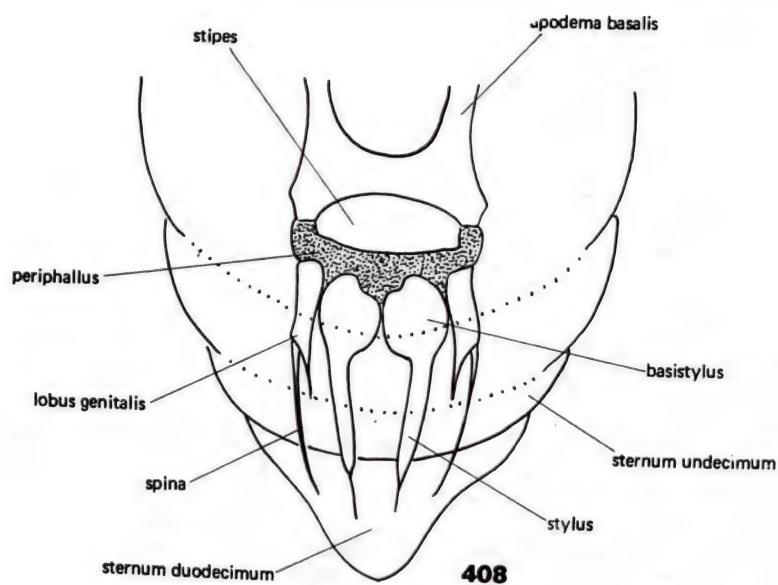
Figs. 393–398. Diagrammatic representations of the phallus. — 393: The phallus with its principal parts, 394: simple form, 395: aedeagus partly retracted into the phallorypta, 396: aedeagus enveloped by the phallosome, 397: aedeagus partly retracted in the phallobase, and 398: aedeagus reduced with enlarged phallosome (after Snodgrass)



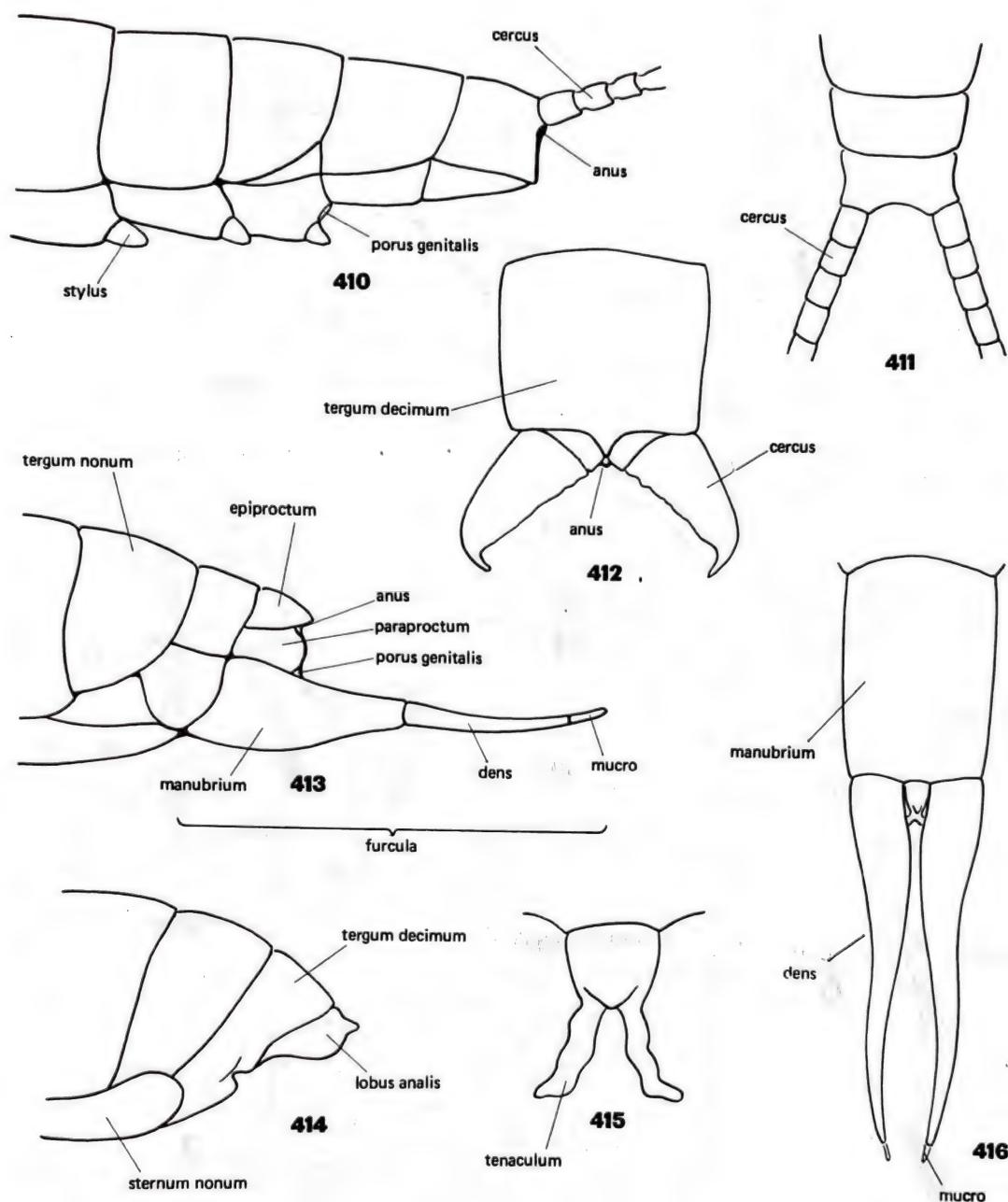
Figs. 399–402. Schematic view of the female genital apparatus. — 399: End of abdomen in longitudinal section, 400: end of abdomen with short ovipositor, 401: the genital pore, 402: ovipositor in cross-section, and 403: end of abdomen with long ovipositor



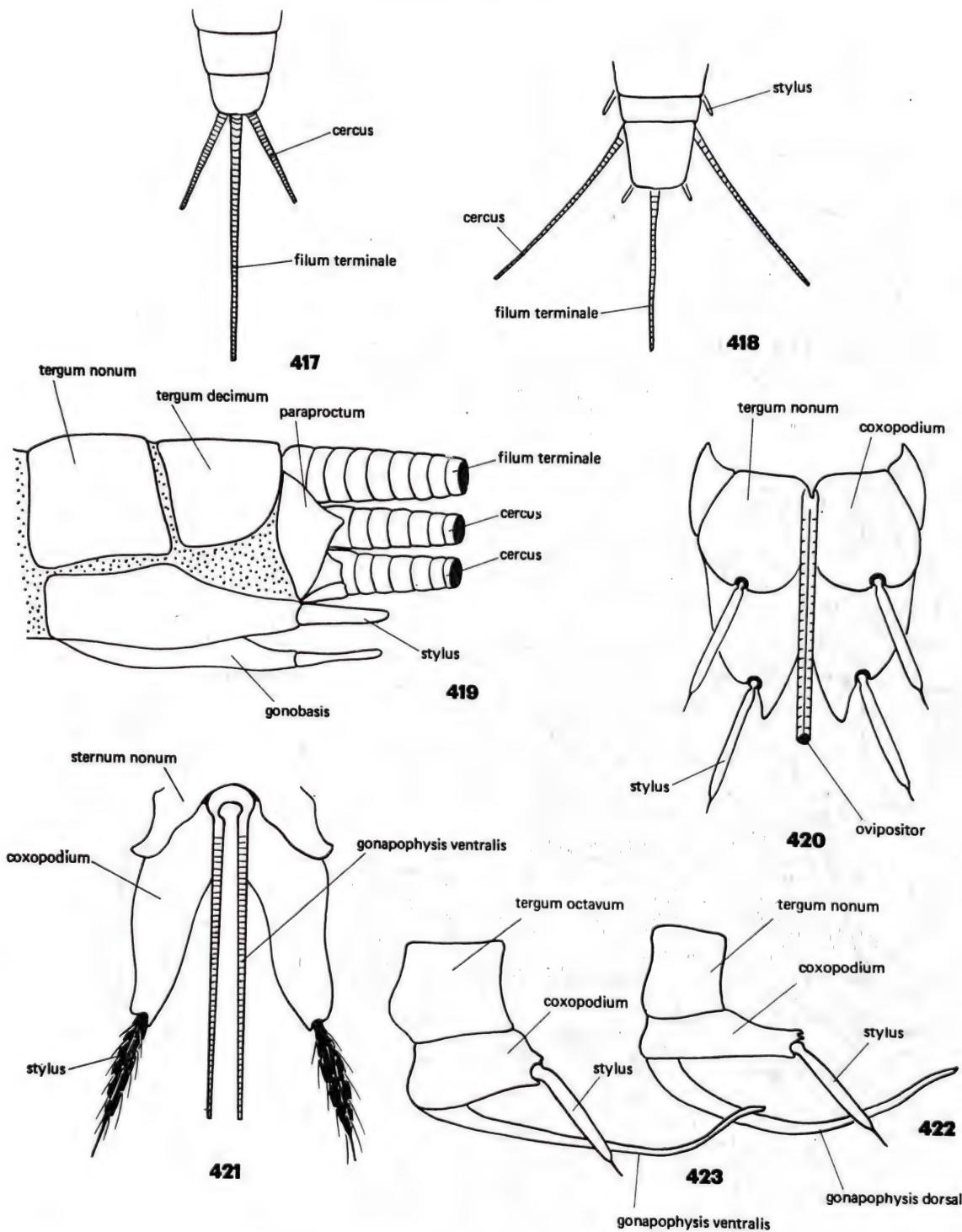
Figs. 404—407. Schematic view of the female copulatory organ. — 404—405: with gonapophyses, and 406—407: with valves (after Snodgrass)



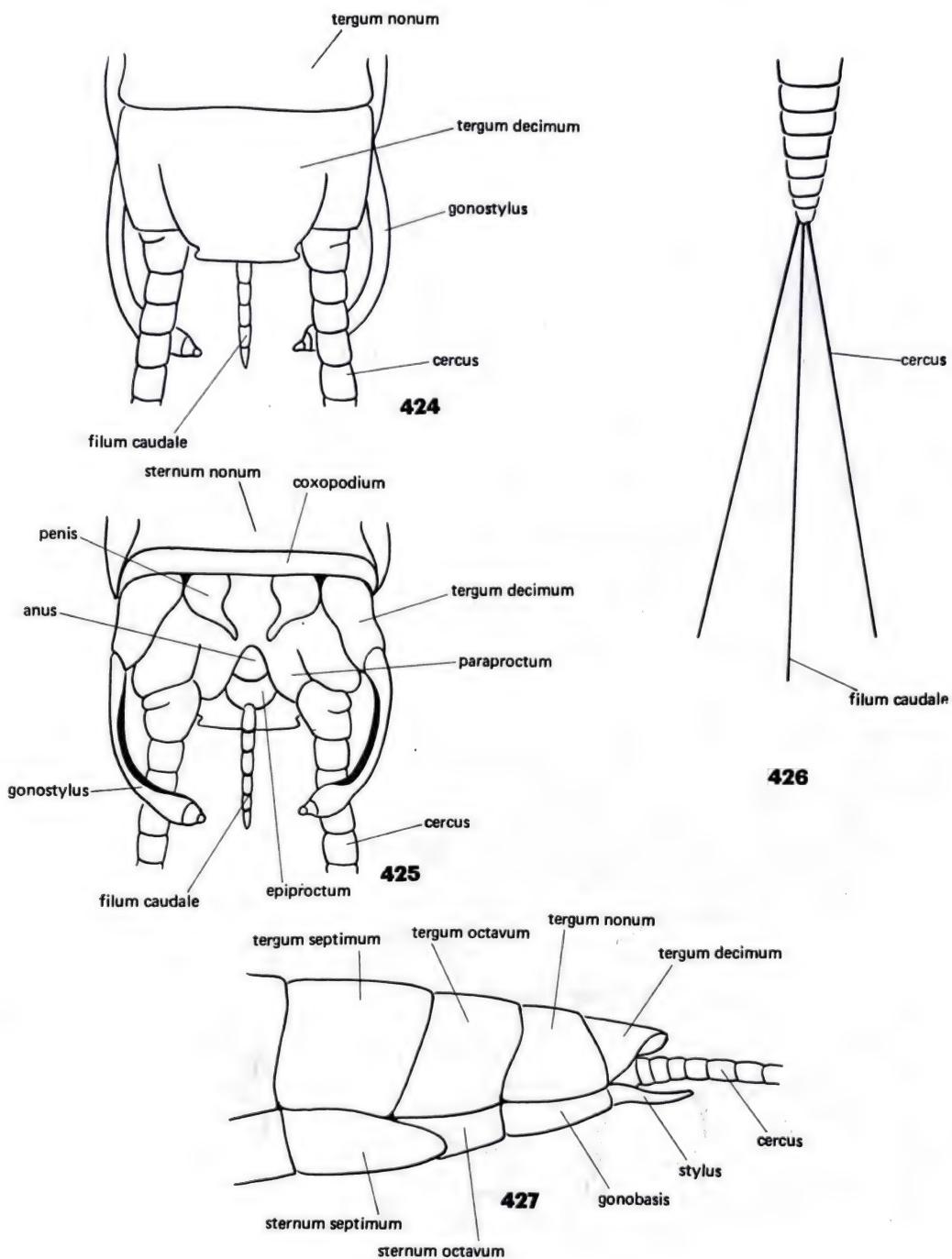
Figs. 408–409. Abdominal end of *Protura* in ventral view, 408: male, and 409: female (after Tuxen)



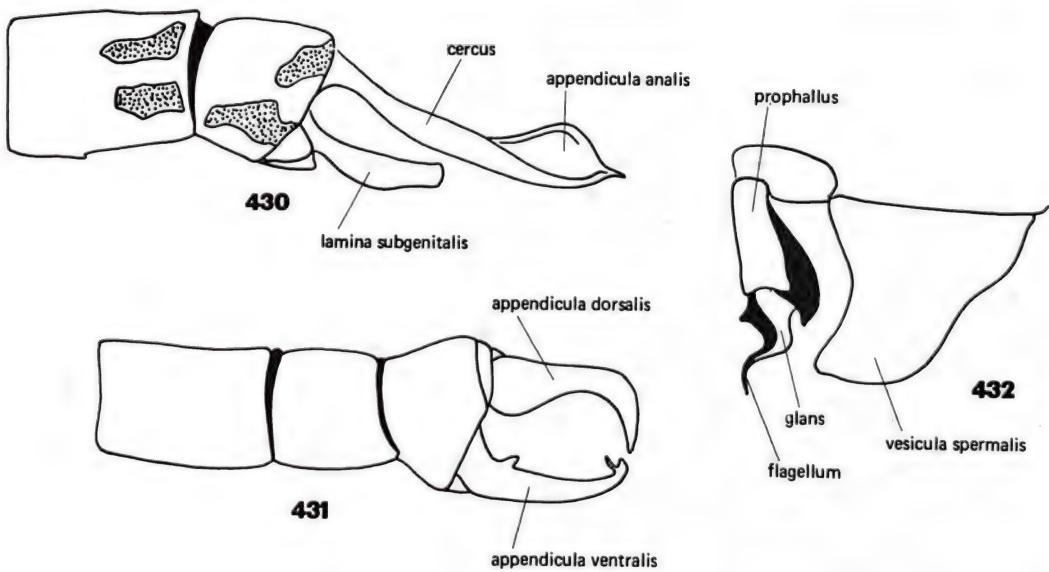
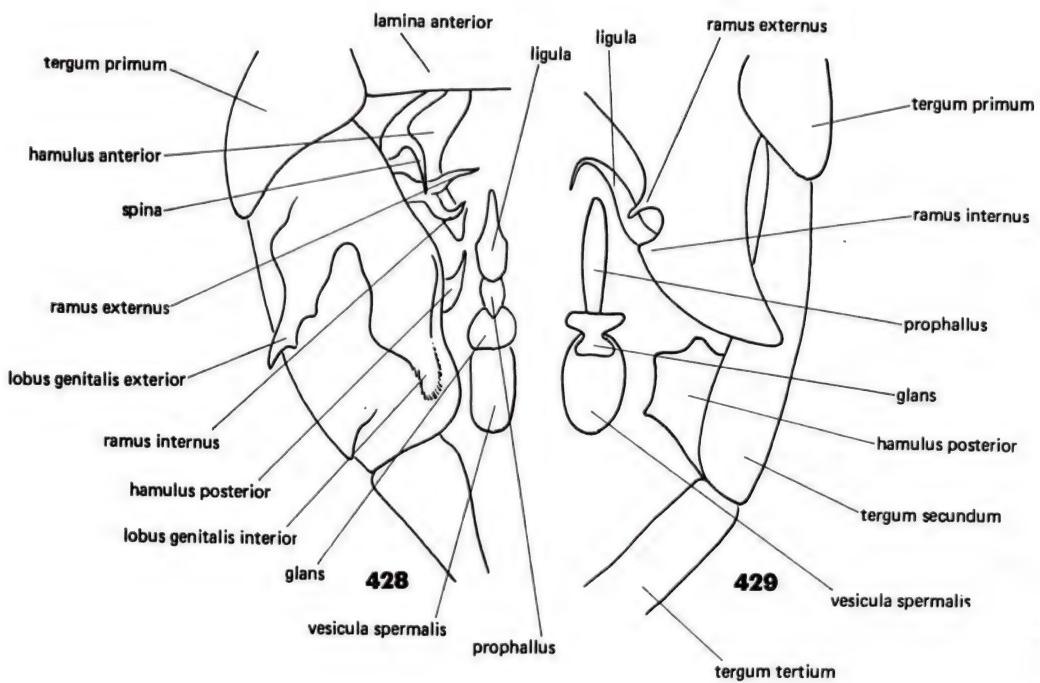
Figs. 410–416. Abdominal end of Diplura and Collembola. — 410–412: Diplura, 410–411: *Campodea*, 410: male, and 411: female, 412: *Heterojapyx*, female. 413–416: Collembola, 413: *Podura*, female, 414–416: *Tomocerus*, 414–415: male in lateral and dorsal view, and 416: female in dorsal view (after Snodgrass 410–412, and Shvanich 413–416)



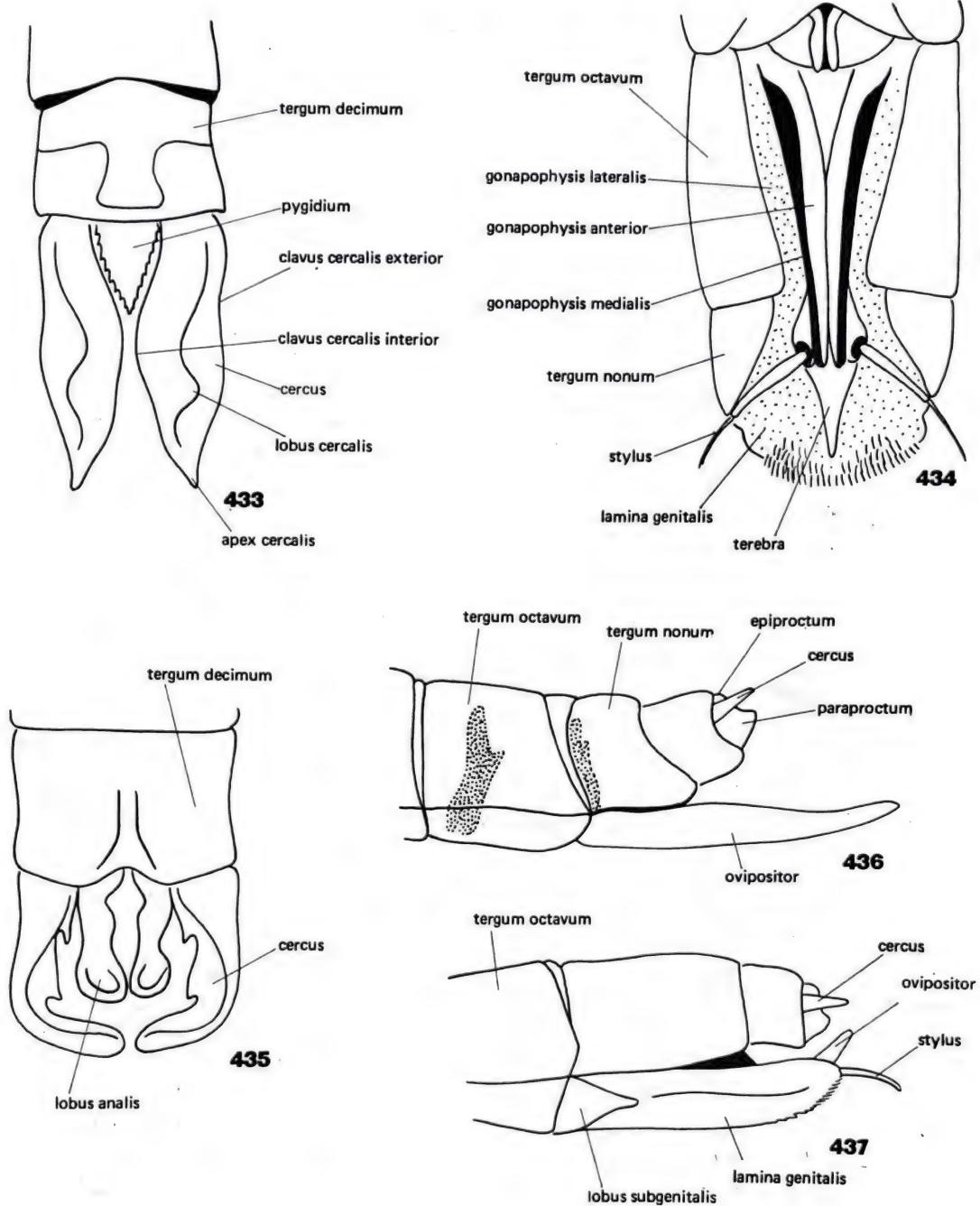
Figs. 417–423. Abdominal end with genital apparatus of Thysanura. — 417: *Machilis*, male, 418: *Lepisma*, male in dorsal view, 419: *Machilis*, male in lateral view, 420: *Petrobius*, female, 421: *Thermobia*, female in ventral view, 422–423: gonapophyses (after Grasse 419, and Snodgrass 420–423)



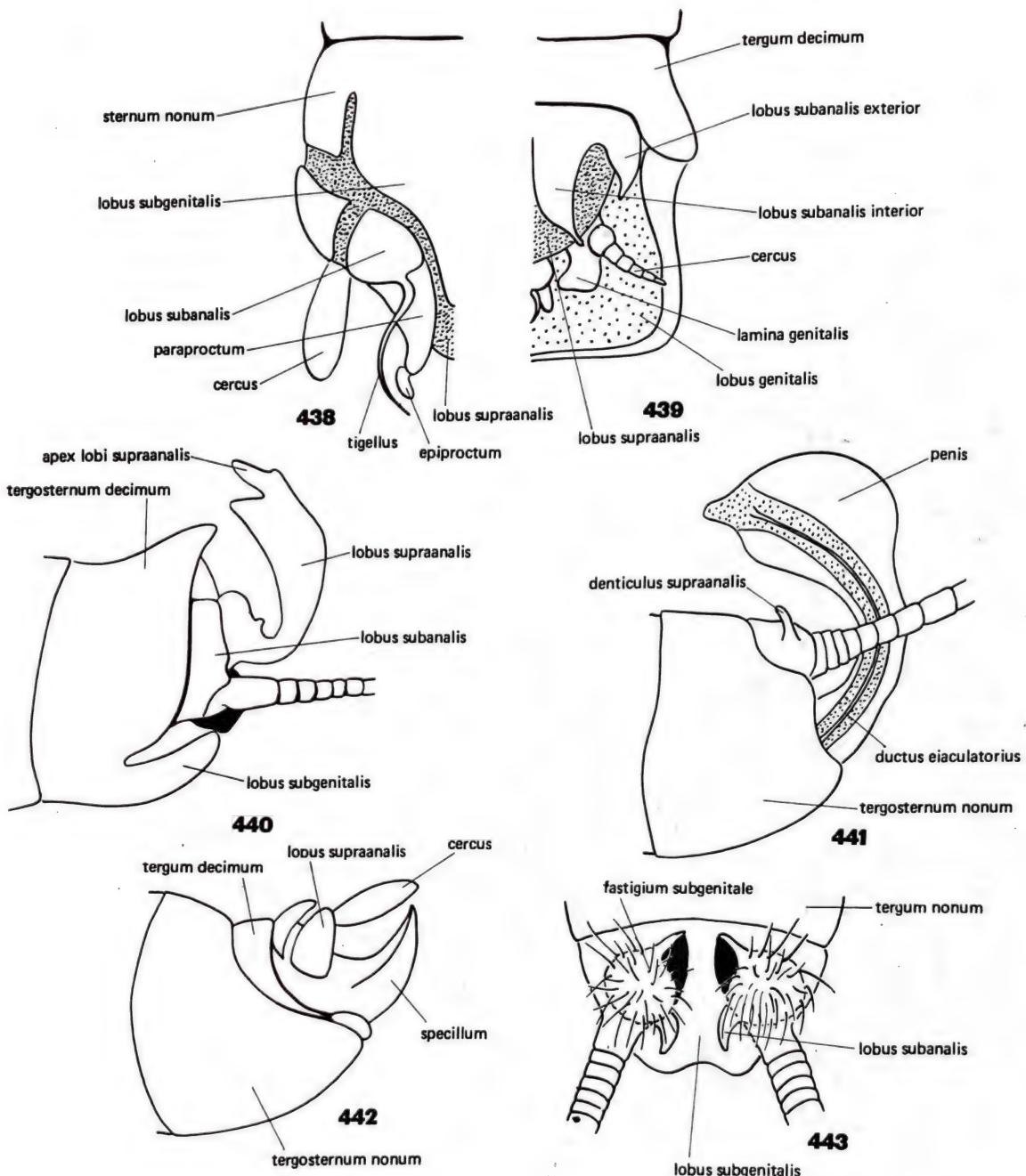
Figs. 424–427. Abdominal end of Ephemeroptera. — 424–425: Hexagenia, male in dorsal and ventral view, 426: terminal appendages, and 427: female, in lateral view (after Snodgrass 424, 425)



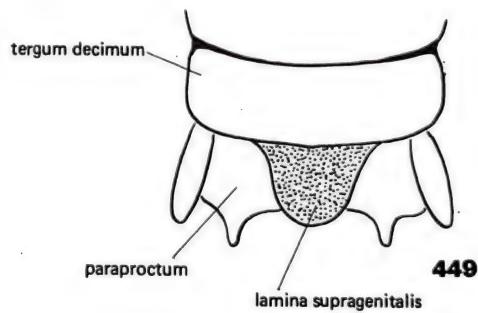
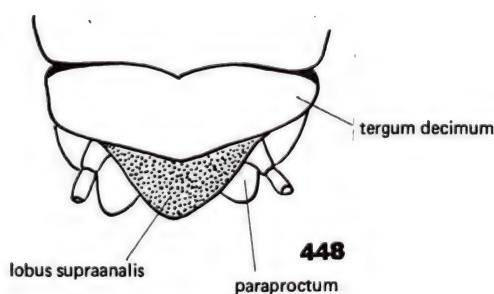
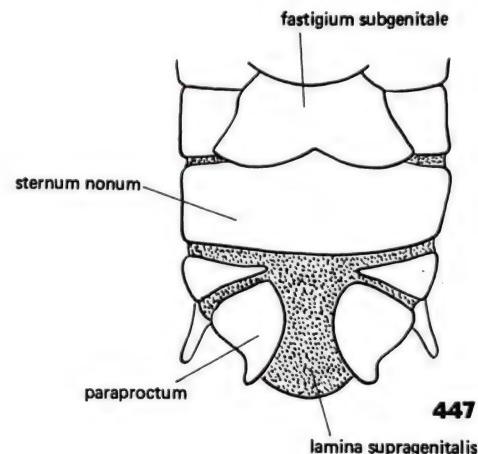
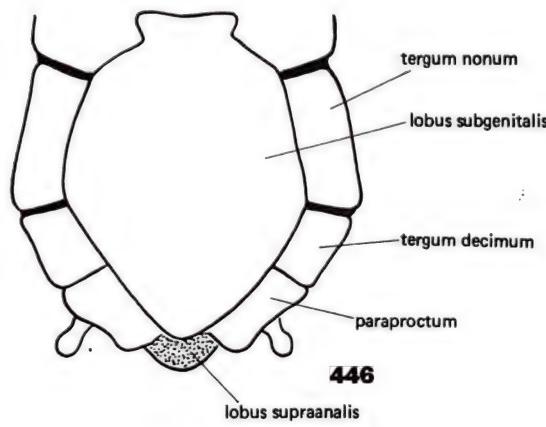
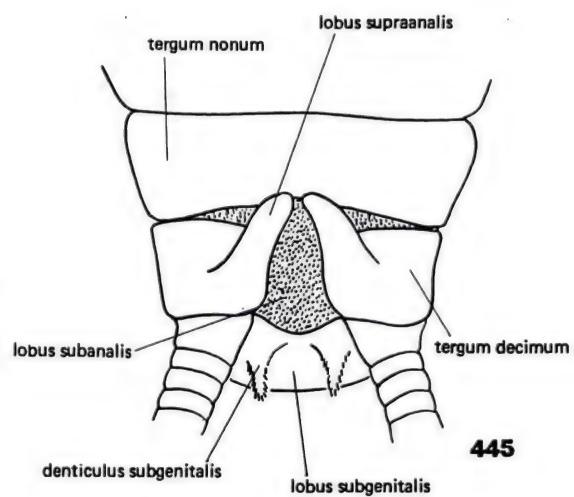
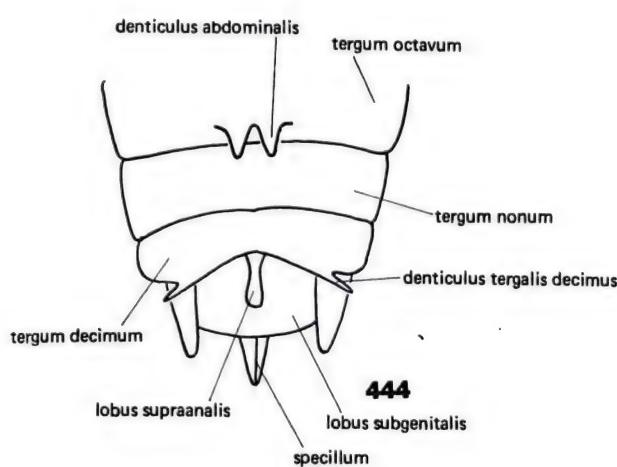
Figs. 428—432. Male genitalia of Odonata. — 428—429: Anisoptera- and Zygoptera-type in ventral view, 430—431: abdominal end of *Aeshna* and *Cordulia* in lateral view, and 432: the typical phallus



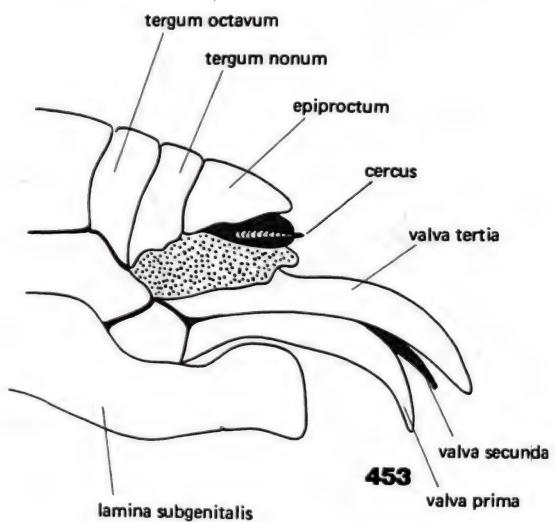
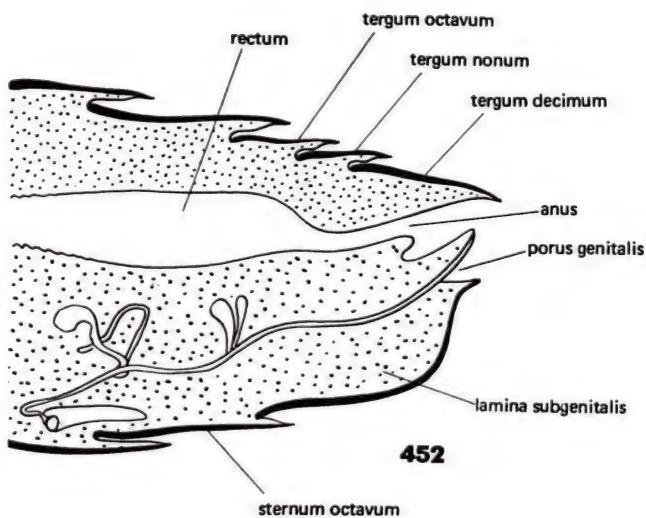
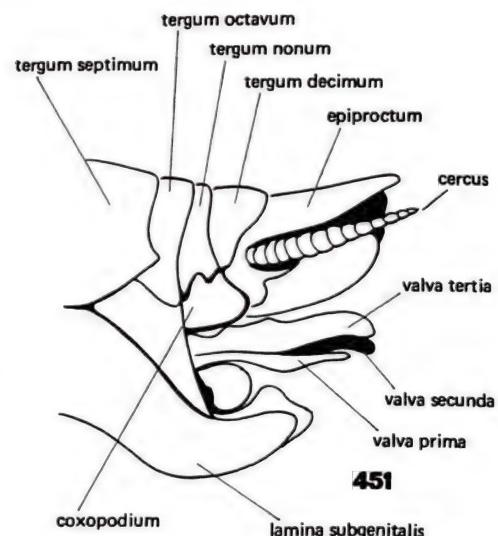
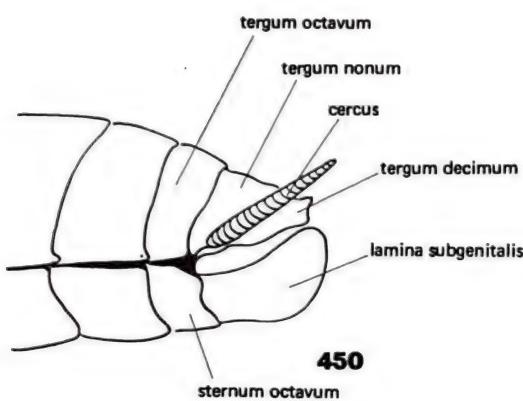
Figs. 433—437. Female genitalia of Odonata. — 433: Abdominal end of *Anax* in dorsal view, 434: same of *Aeshna* in ventral view, 435: same of *Lestes* in dorsal view, 436: same of *Cordulegaster*, and 437: *Sympetrum* in lateral view



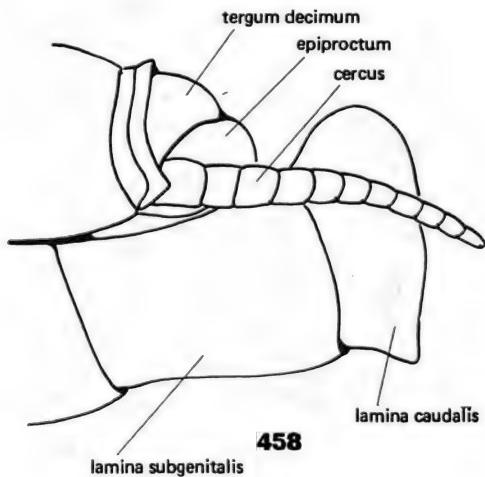
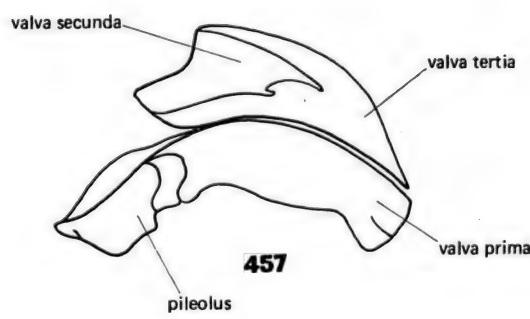
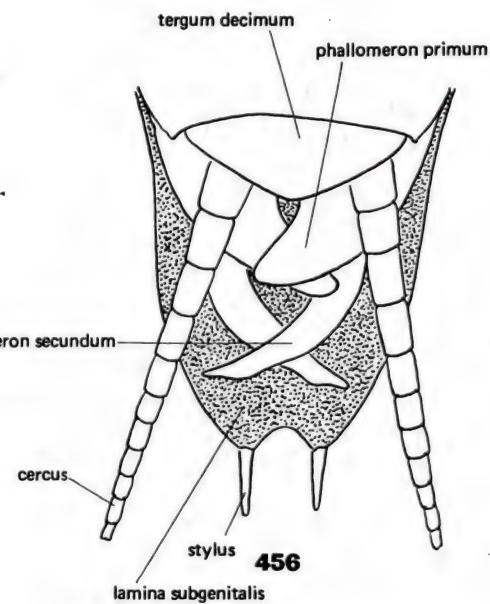
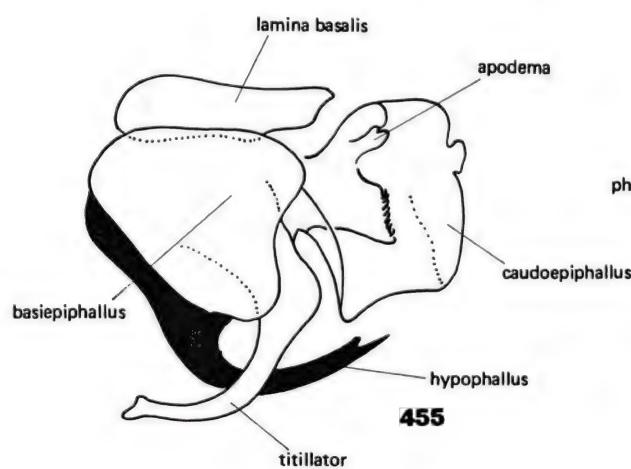
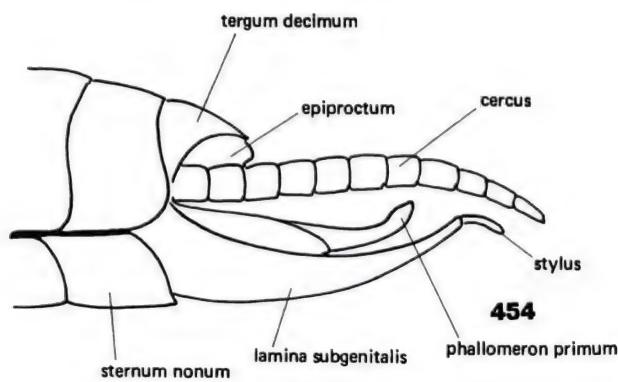
Figs. 438—443. Male genitalia of Plecoptera. — 438: Abdominal end of *Protonemura* in ventral view, 439: same of *Rhabdiopteryx* in dorsal view, 440: same of *Capnia*, 441: *Chloroperla*, and 442: *Leuctra* in lateral view, and 443: same of *Dictyogenus* in dorsal view (after Steinmann)



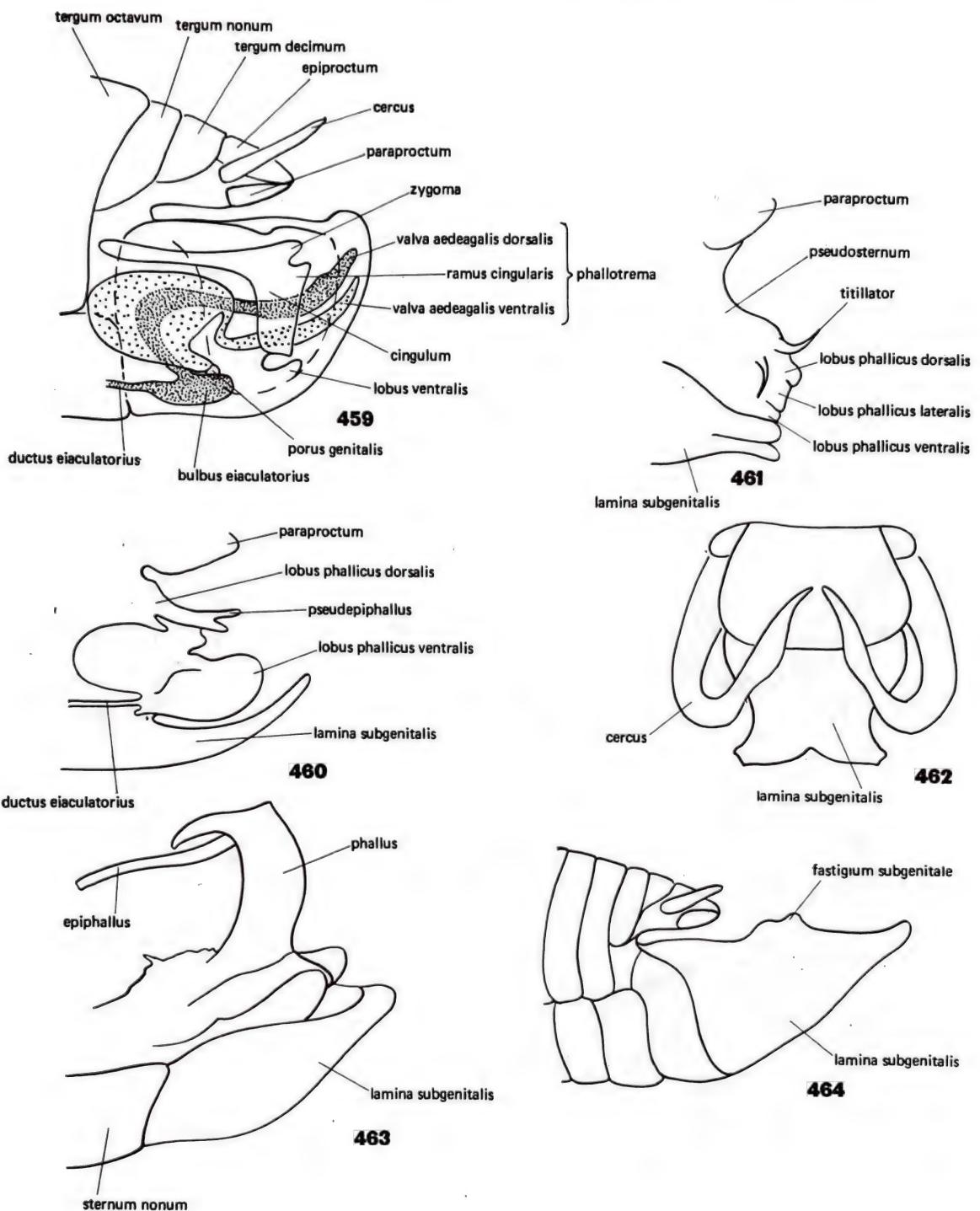
Figs. 444–449. Female genitalia of Plecoptera. — 444: Abdominal end of *Leuctra*, and 445: *Perla* in dorsal view, 446: same of *Taeniopteryx*, and 447: *Protonemura* in ventral view, 448: same of *Taeniopteryx*, and 449: *Protonemura* in dorsal view (after Steinmann)



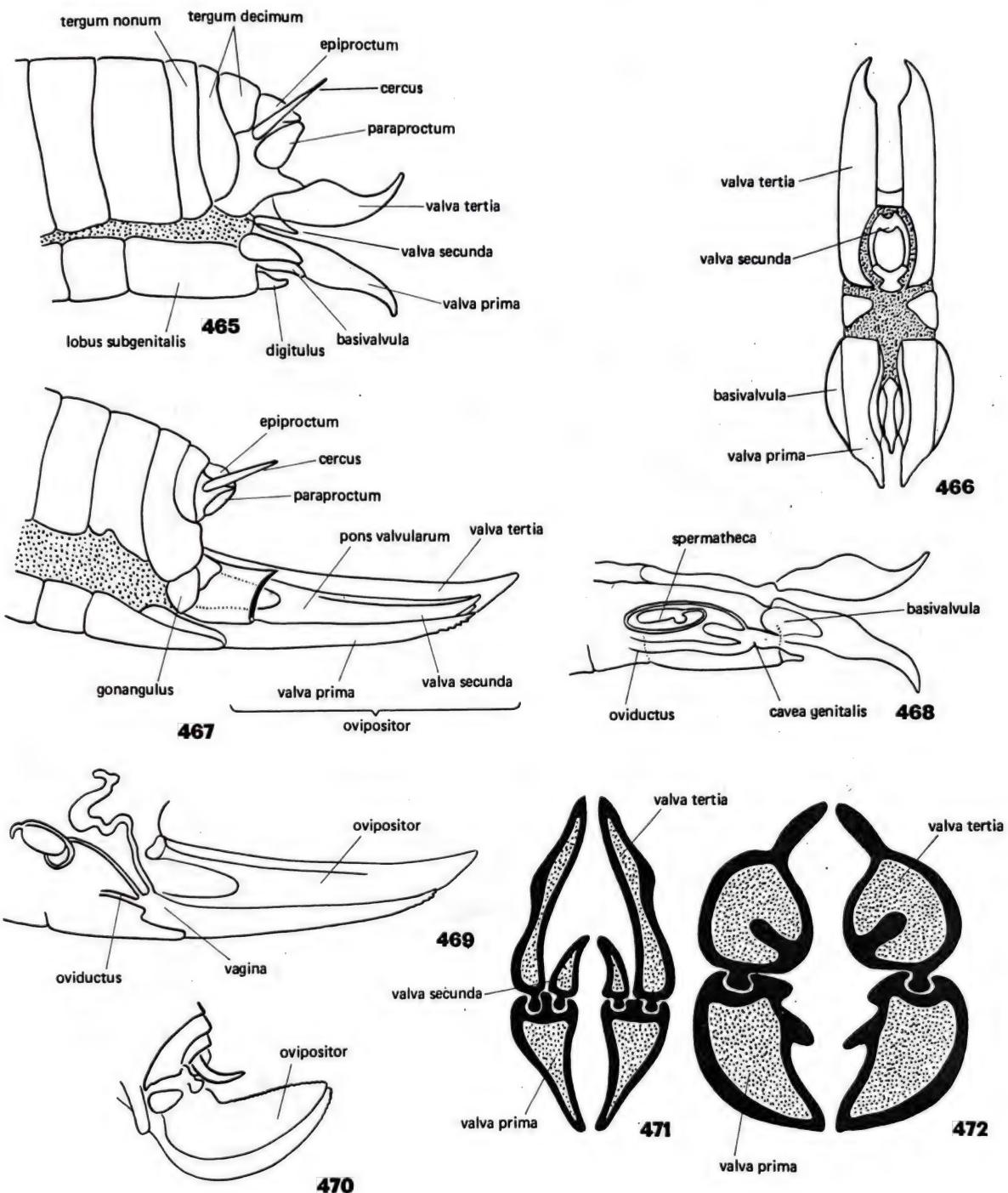
Figs. 450—453. Male and female genitalia of Blattaria. — 450: Abdominal end of male *Periplaneta* in lateral view, 451—453: same of female in lateral view, 451: *Uraloblatta*, 452: *Blatta*, and 453: *Periplaneta* (after Shvanvich)



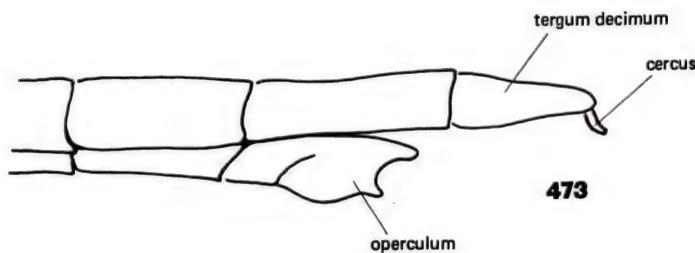
Figs. 454—458. Male and female genitalia of Mantoidea. — 454: Abdominal end of male Mantis in lateral view, 455: male genitalia of Polyspilota in dorsal view, 456: abdominal end of male Mantis in dorsal view, 457: ovipositor of Polyspilota in lateral view, and 458: abdominal end of female Mantis in lateral view (after Beier)



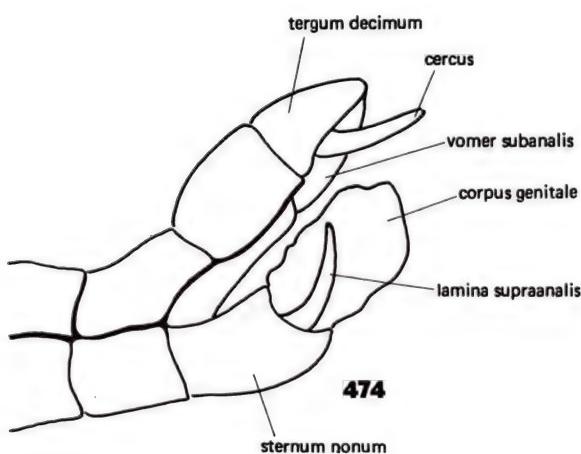
Figs. 459–464. Male genitalia of Orthoptera. — 459: Abdominal end of an Acridid in longitudinal section in lateral view, 460: genital organ of an Acridid in lateral view, 461: genital organ of a Gryllid in lateral view, 462: abdominal end of a Tettigoniid in dorsal view, 463: copulatory organ of *Locusta* in lateral view, and 464: abdominal end of *Acride* in lateral view (after Ander 459–461, 464, and Shvanvich 462, 463)



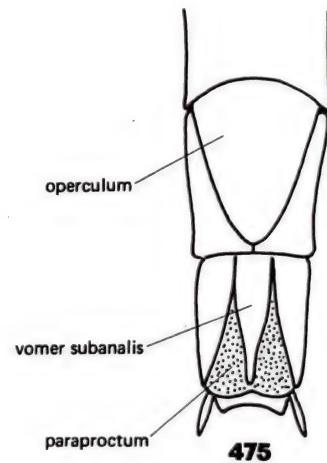
Figs. 465—472. Female genitalia of Orthoptera. — 465: Abdominal end of an Acridid in lateral view. 466: ovipositor of same in cross-section, 467: abdominal end of a Tettigonid in lateral view, 468: ovipositor of an Acridid with inner organs in longitudinal section in lateral view, 469: same of a Tettigonid, 470: ovipositor of Phaneroptera, 471—472: ovipositor in cross-section, 471: *Tettigonia*, and 472: *Gryllus* (after Shvanich)



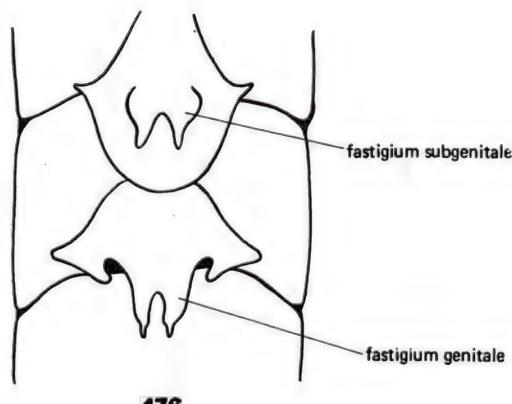
473



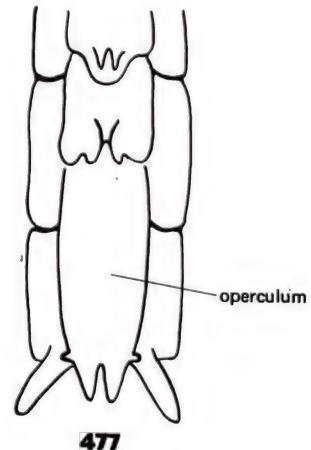
474



475

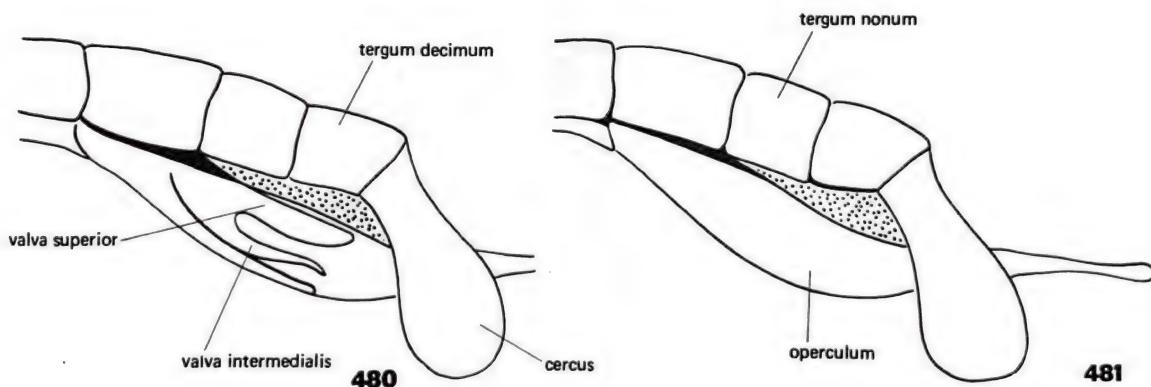
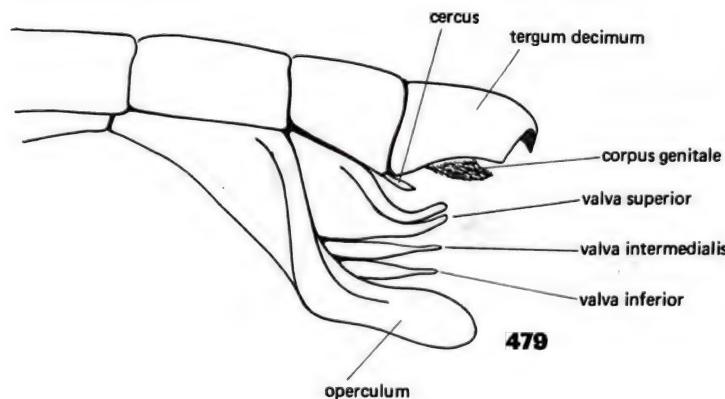
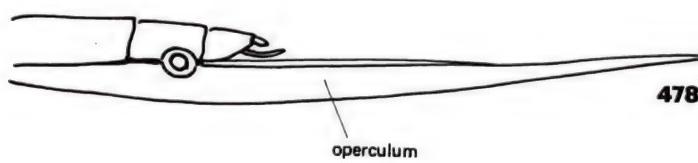


476

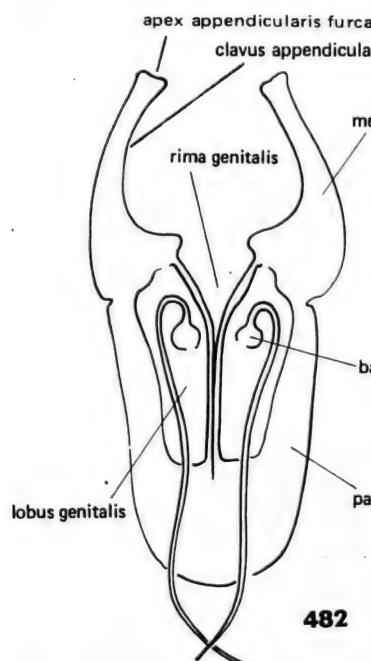


477

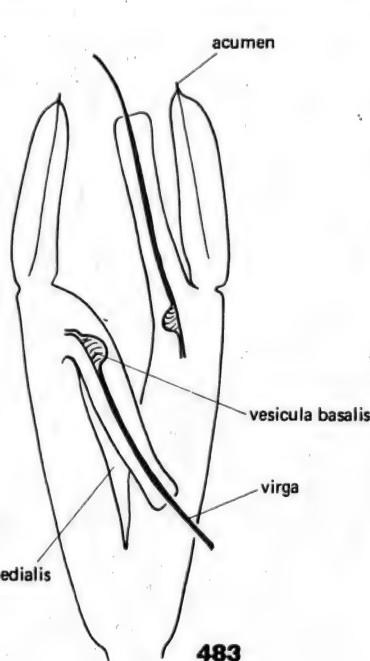
Figs. 473—477. Male genitalia of Phasmoidea. — 473: Abdominal end of *Calyndra*, and 474: same of *Gigantophasmus* in lateral view, 475: abdominal end of *Calyndra* in ventral view, 476: part of abdomen in ventral view of *Phasma*, and 477: abdominal end of *Carausius* in ventral view (after Günther)



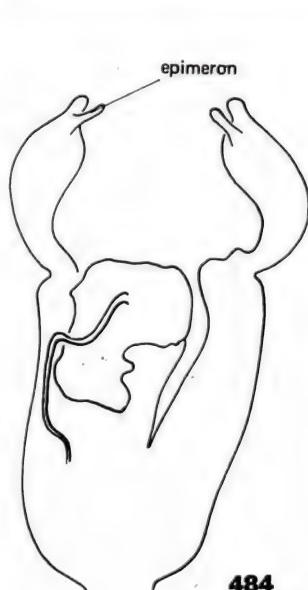
Figs. 478—481. Female genitalia of Phasmoidea. — 478: Abdominal end of *Calyndra* in lateral view, 479: same of *Carausius*, and 480—481: same of *Gigantophasma* (after Günther 478, Shvanvich 479, and Grasse 480—481)



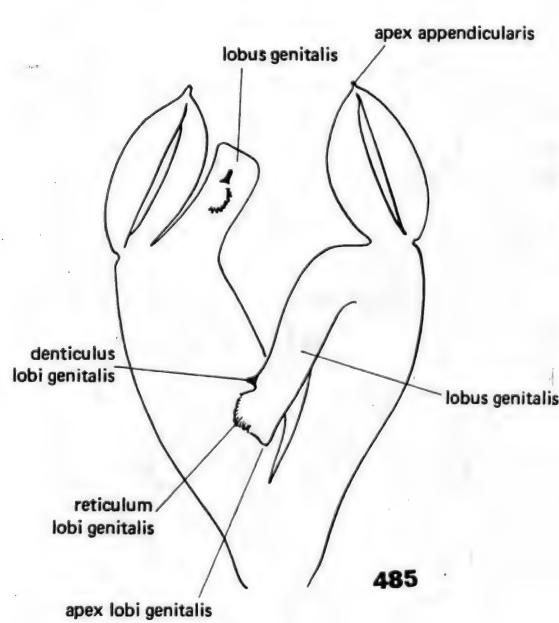
482



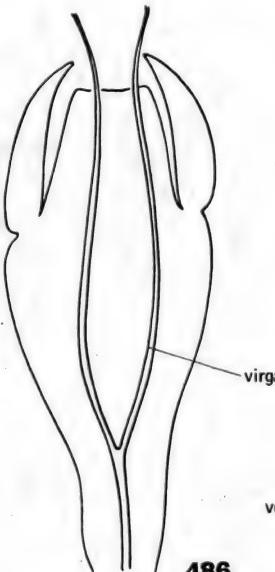
483



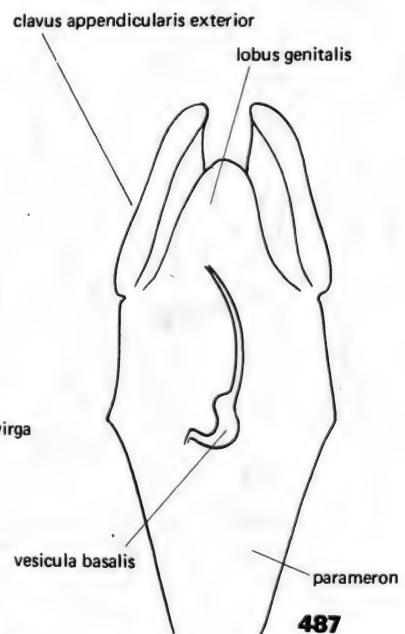
484



485

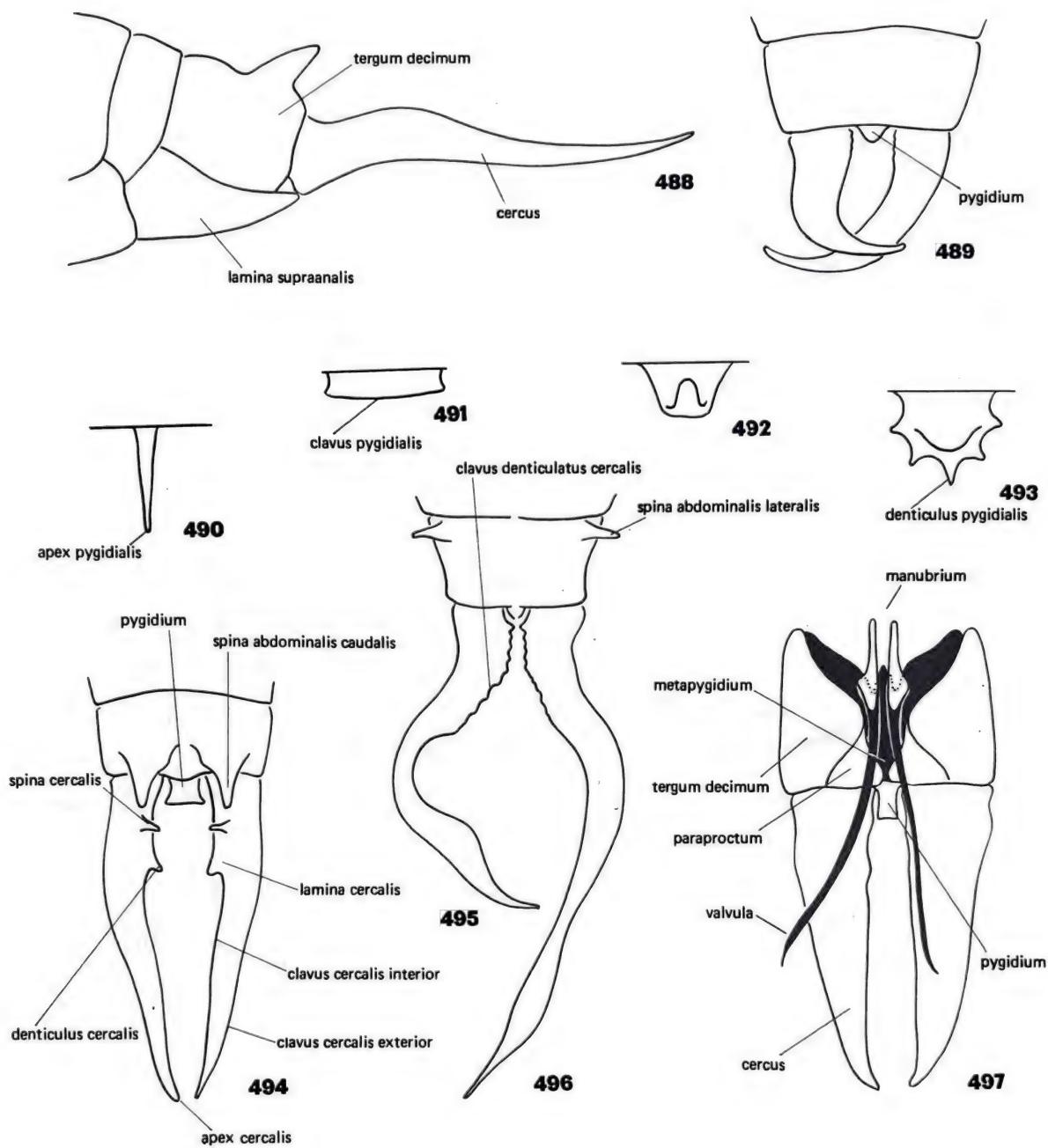


486

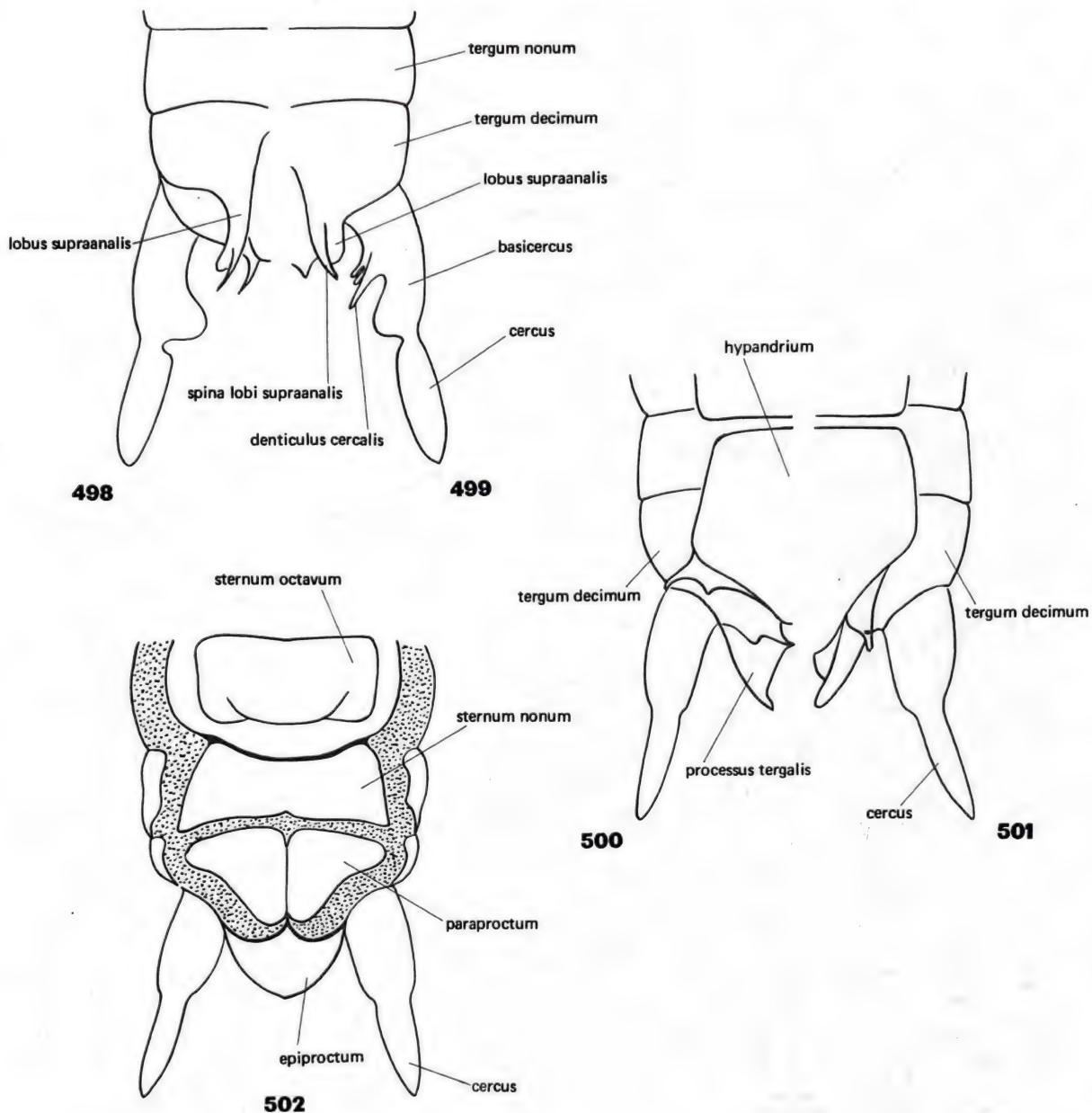


487

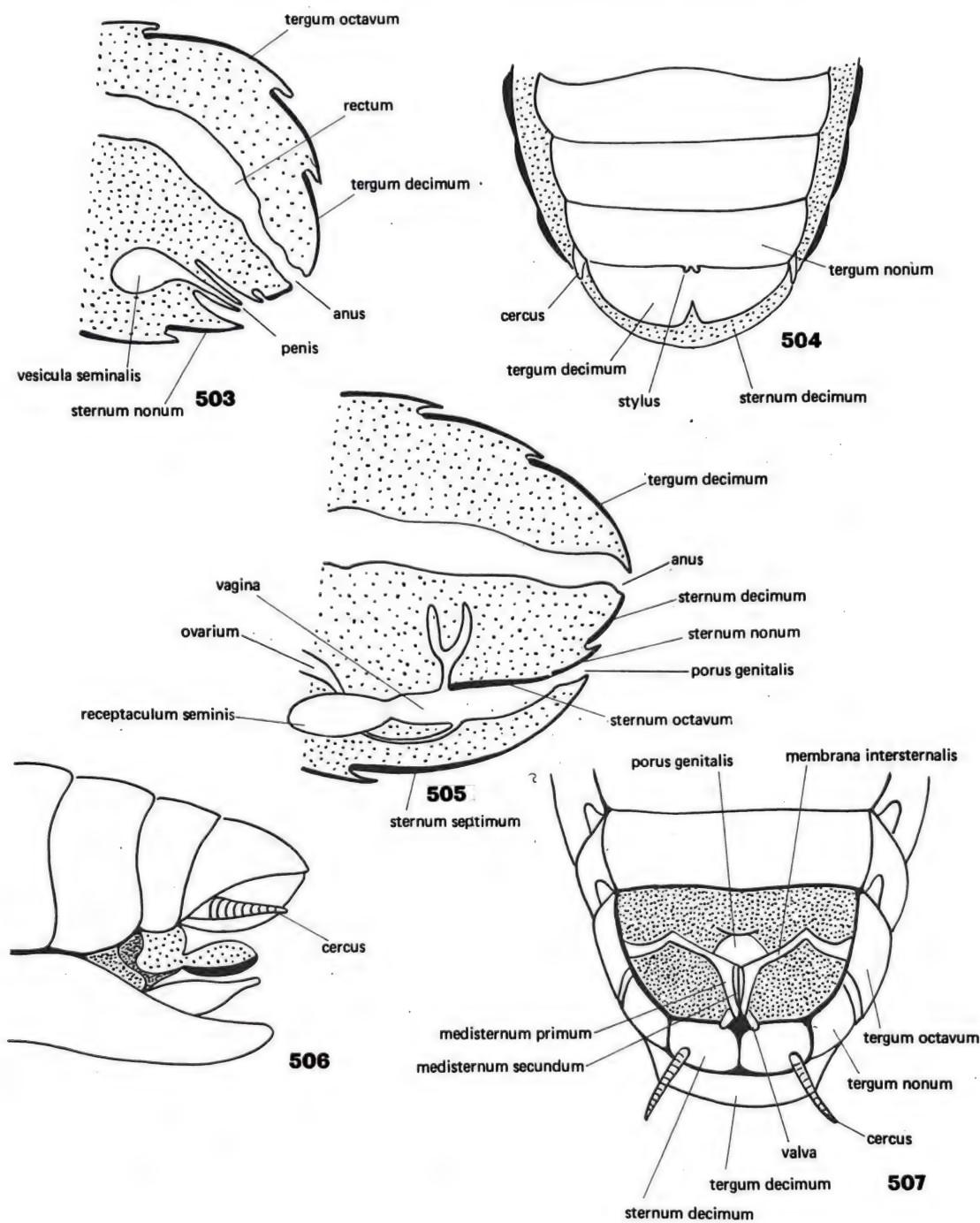
Figs. 482–487. Male genitalia of Dermaptera. — 482: *Diplatys*, 483: *Labidura*, 484: *Karschiella*, 485: *Euborellia*, 486: *Hemimerus*, and 487: *Forficula* (after Steinmann)



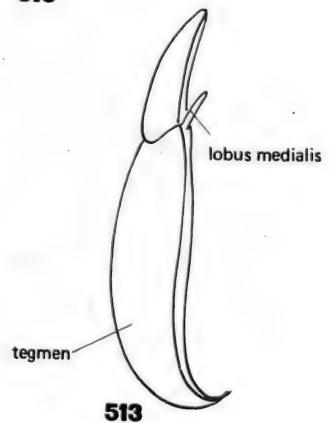
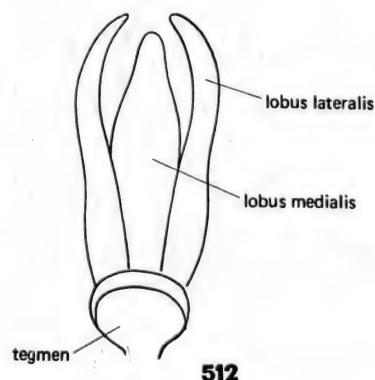
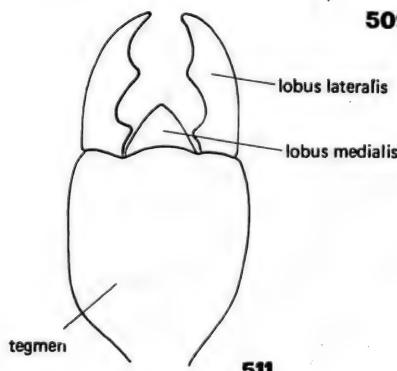
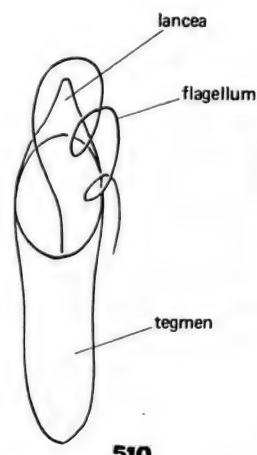
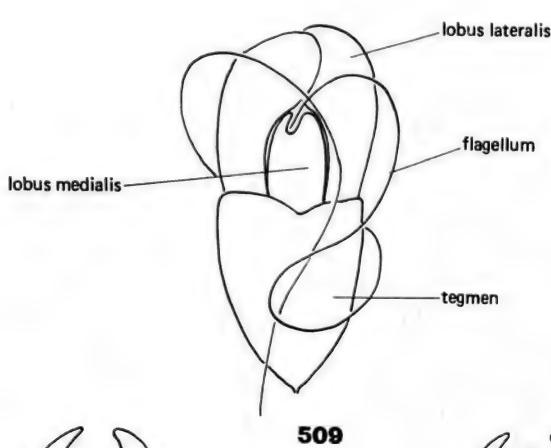
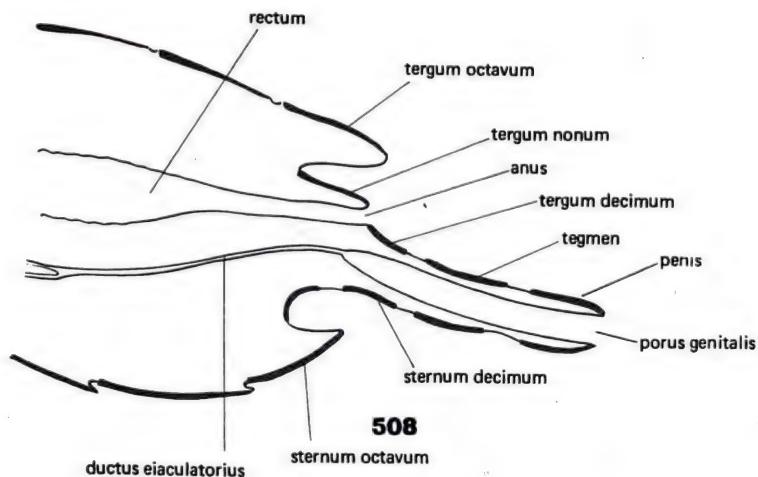
Figs. 488–497. Male and female genitalia of Dermaptera. — 488: Abdominal end with forceps of Vandex in lateral view, 489: same with asymmetric forceps of Anisolabis in dorsal view, 490–493: pygidium of 490: Doru, 491: Anechura, 492: Apterygida, and 493: Strongylopsalis, 494: abdominal end with symmetrical forceps of Vandex in dorsal view. 495–496: microlabia and macrolabia in Timomenus, and 497: abdominal end with forceps of female Anisolabis in ventral view (after Steinmann)



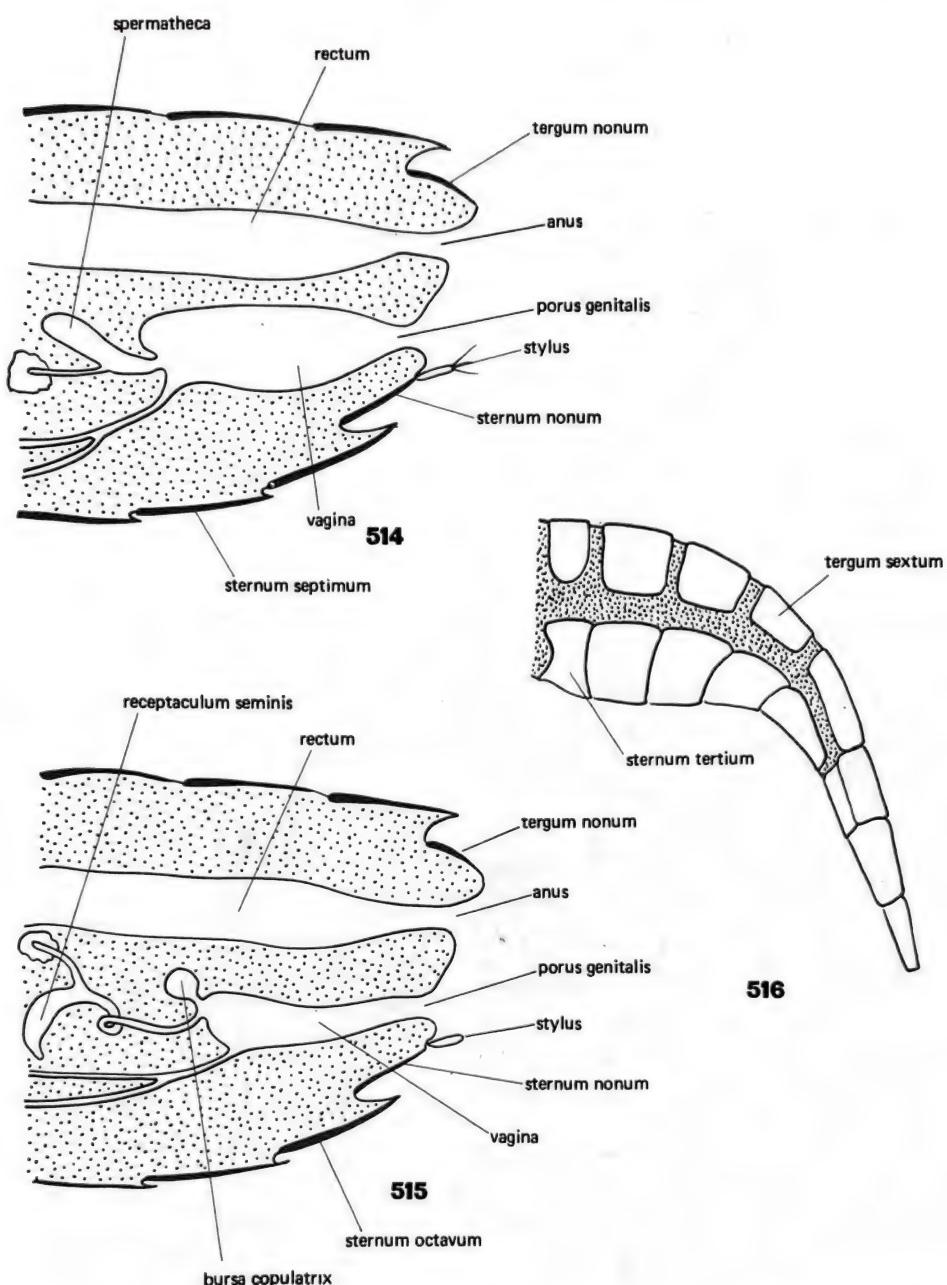
Figs. 498–502. Male and female genitalia of Embioptera. — 498–499: Abdominal end of male *Embia* and *Teratembia* in dorsal view, 500–501: same in ventral view, and 502: same of female *Embia* in ventral view (after Ross)



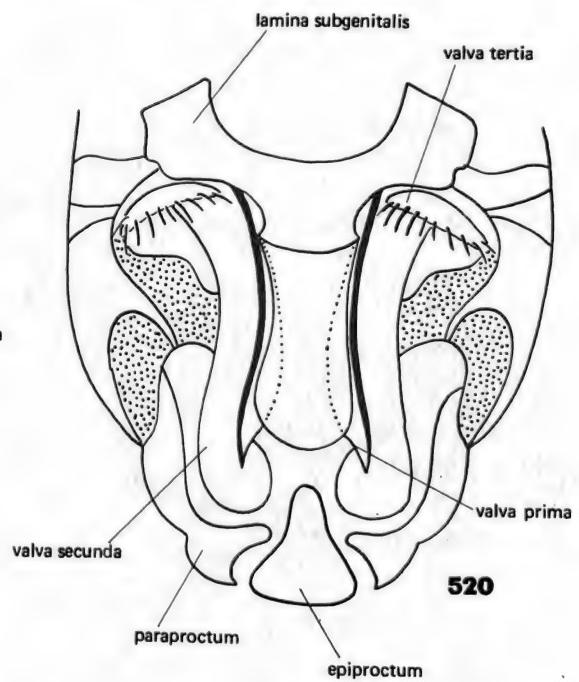
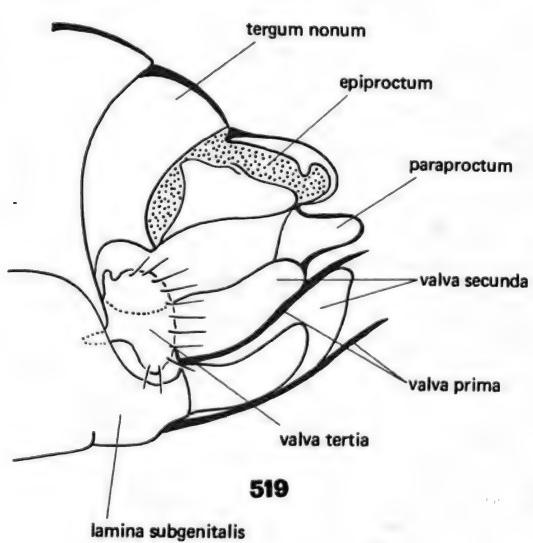
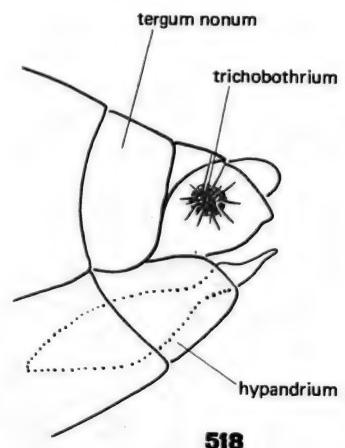
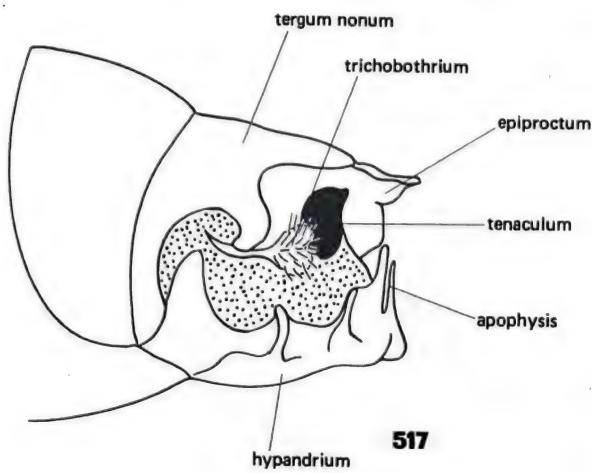
Figs. 503–507. Male and female genitalia of Isoptera. — 503–504: Abdominal end of male, 503: longitudinal section in lateral view, and 504: in ventral view, 505–507: abdominal end of female, 505: longitudinal section in lateral view, 506: in lateral view, and 507: in ventral view (after Roonwall)



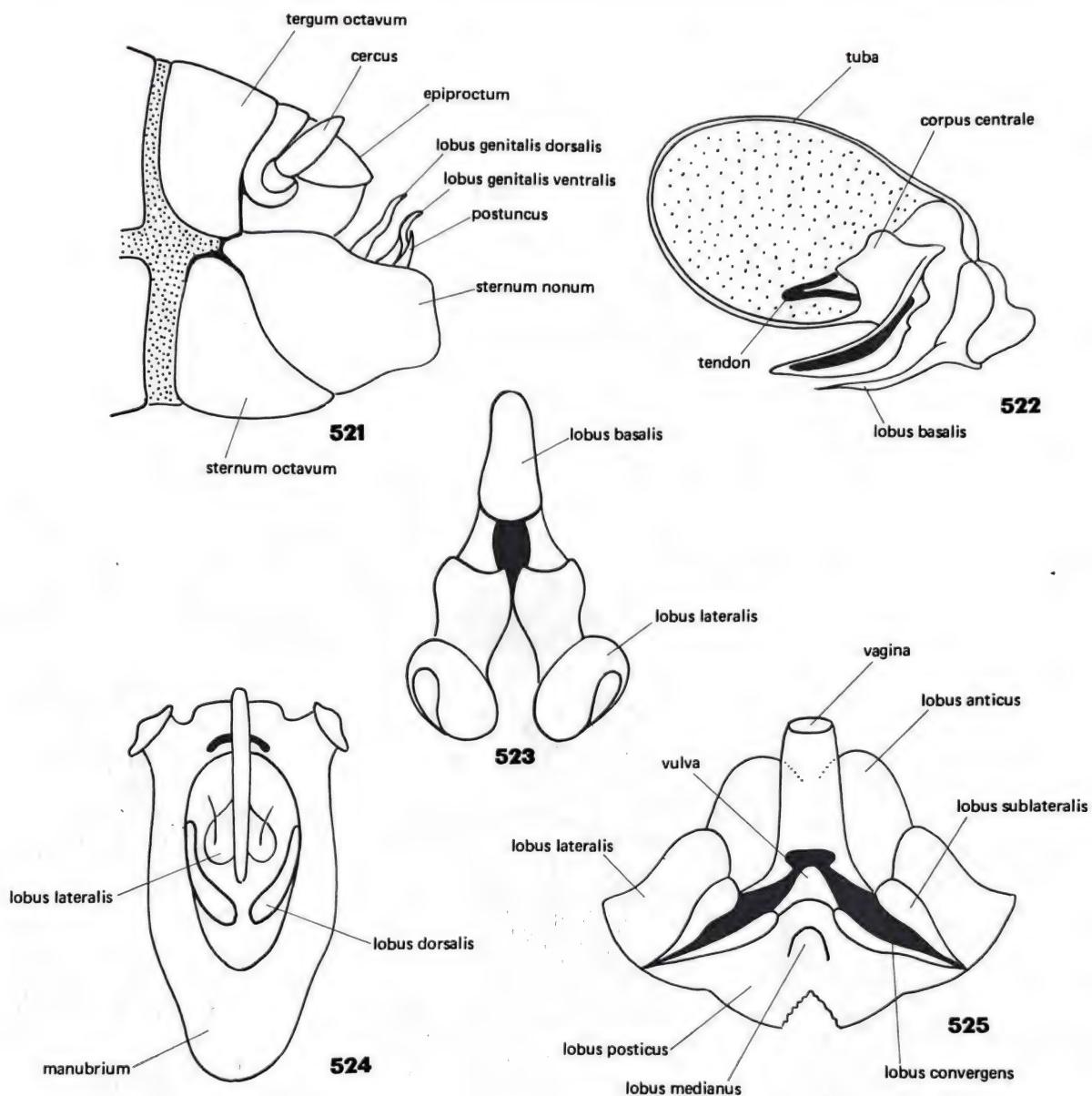
Figs. 508–513. Male genitalia of Coleoptera. — 508: Schematic drawing of abdominal end in lateral view, 509–513: principal types of aedeagus of 509: *Lucanus*, 510: *Platytarsus*, 511: *Liodes*, 512: *Silpha*, and 513: *Nilio* (after Lindroth and Palmén)



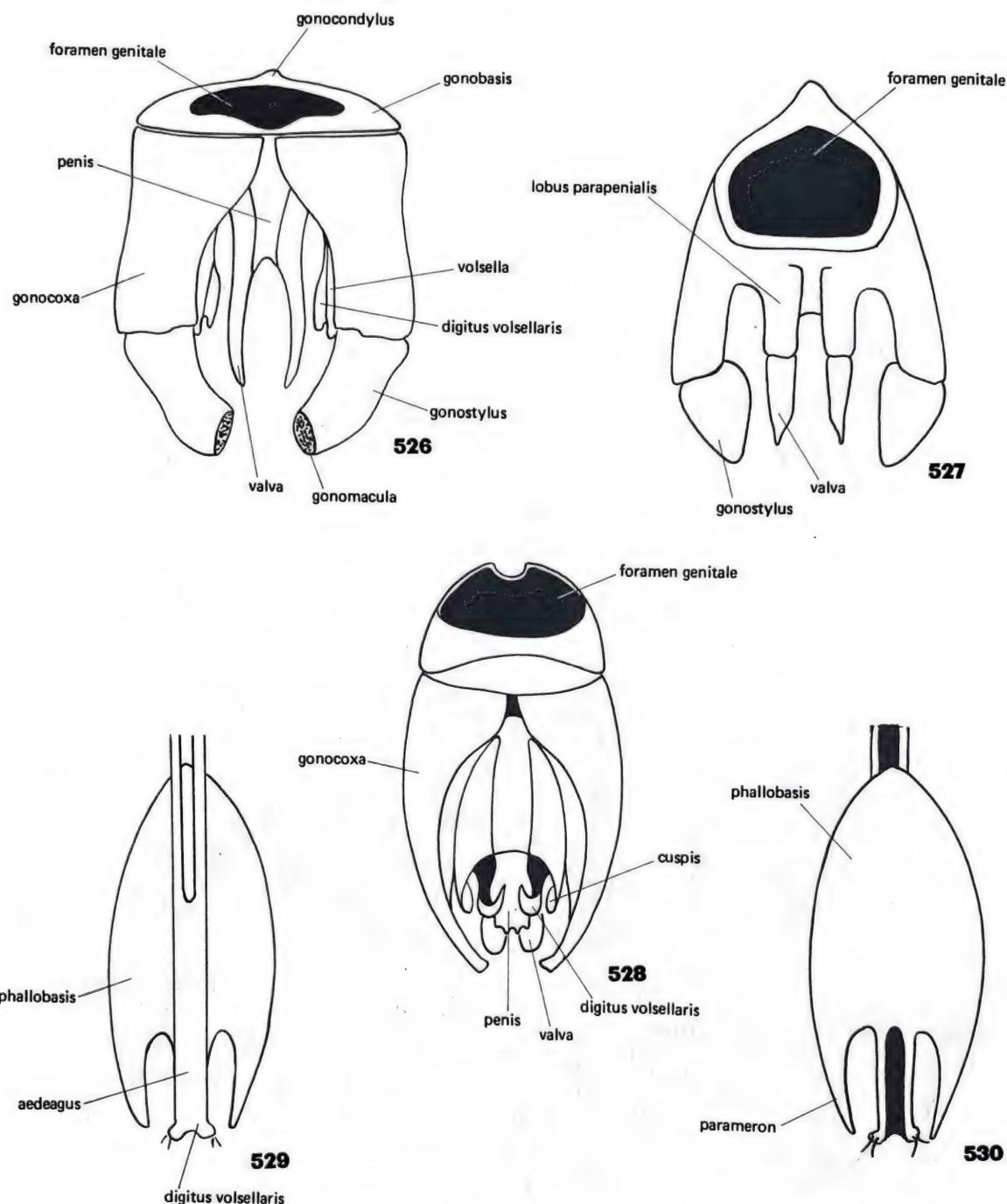
Figs. 514–516. Female genitalia of Coleoptera. — 514: Abdominal end in longitudinal section in lateral view: the saccular type, and 515: same, the tubular type, and 516: a typical abdomen in lateral view (after Heberdey)



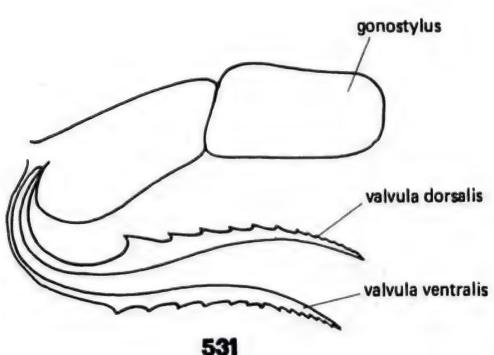
Figs. 517–520. Male and female genitalia of Psocoptera. — 517: Abdominal end of male *Psocus*, and 518: same of male *Mesopsocus* in lateral view, 519: same of female *Metylophorus* in lateral, and 520: in ventral view (after Badonnel)



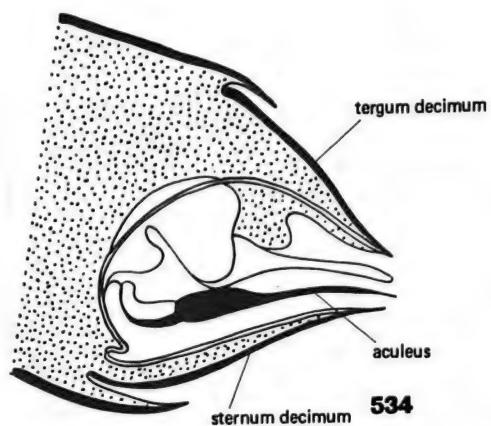
Figs. 521—525. Male and female genitalia of Zoraptera. — 521: Abdominal end of male *Zorotypus* in lateral view, and 522: copulatory organ of same, 523: same in ventral view, 524: genitalia in dorsal view, and 525: female genitalia in dorsal view (after Gurney 521, Deboutteville 522—524, and Silvestri 525)



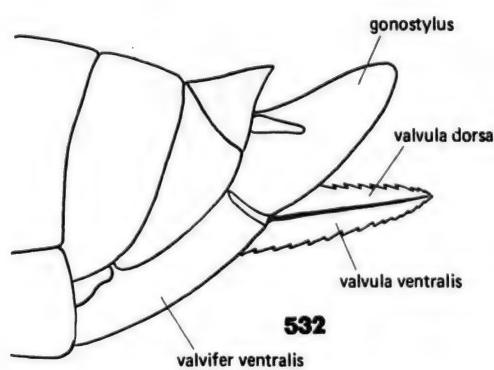
Figs. 526–530. Male genitalia of Hymenoptera. — 526: Copulatory organ of male *Xiphydria* in dorsal view, 527: same of male *Gilpinia*, 528: same of male *Ammophila* in ventral view, 529–530: aedeagus of *Poropoea* in dorsal and ventral view (after Michener)



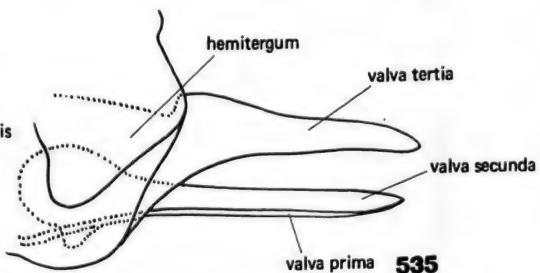
531



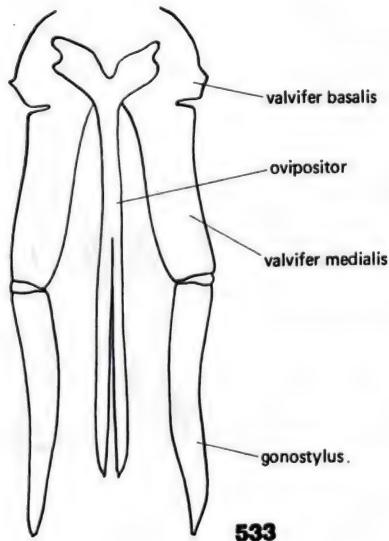
534



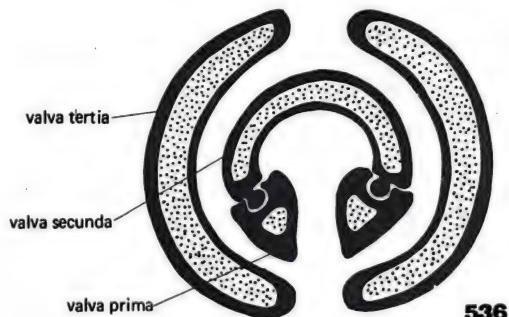
532



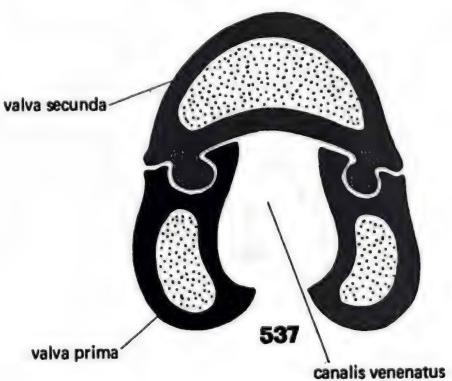
535



533

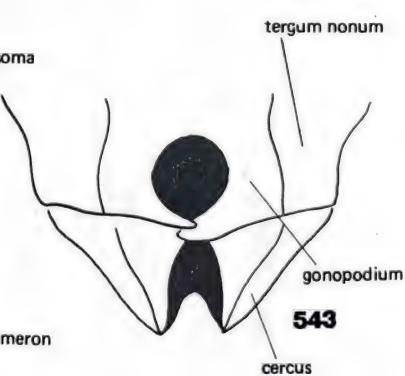
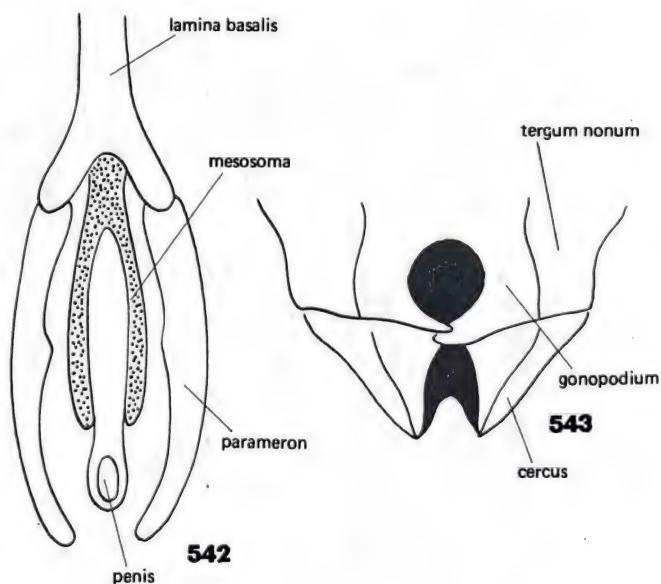
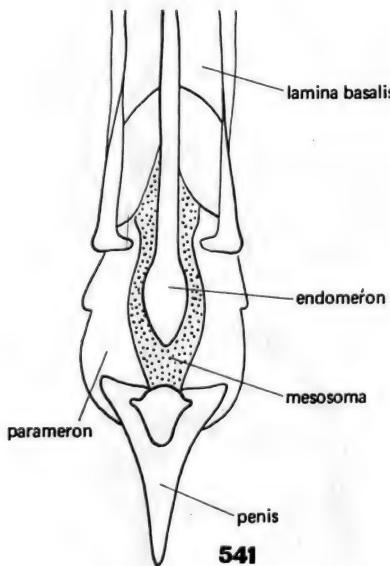
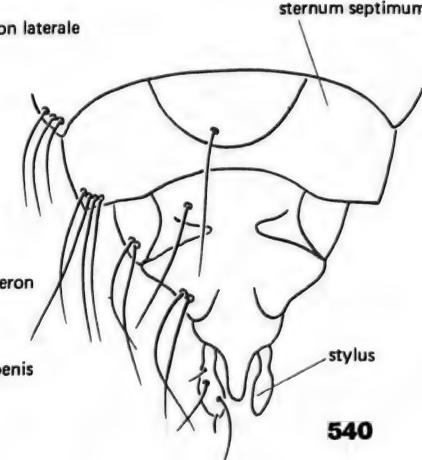
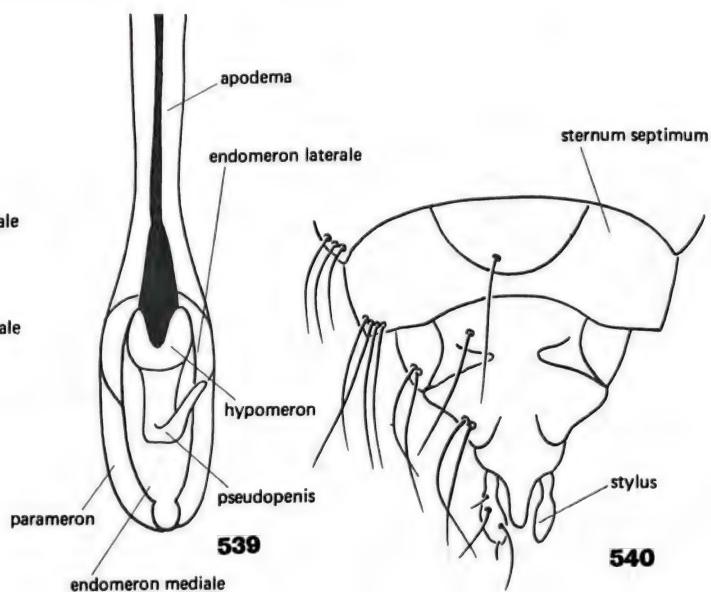
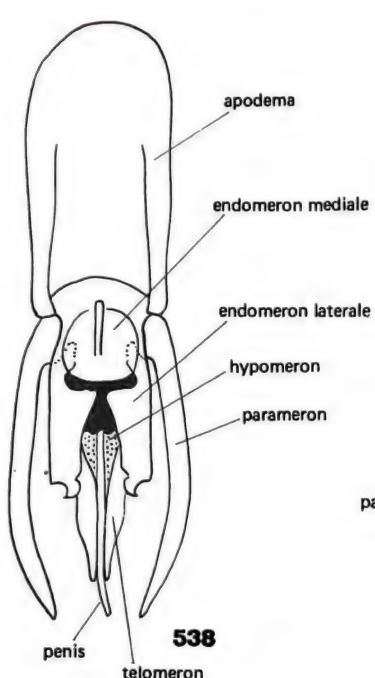


536

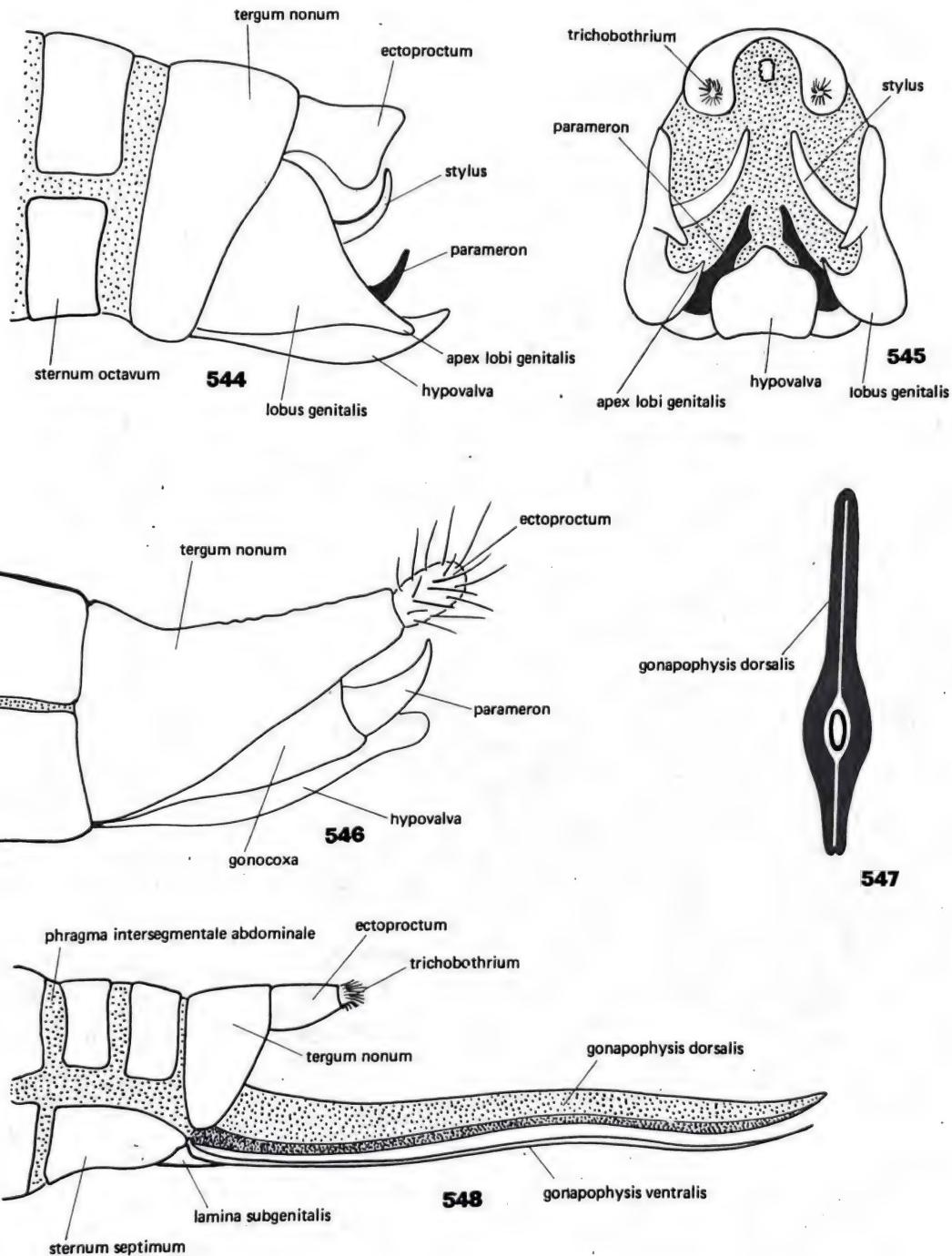


537

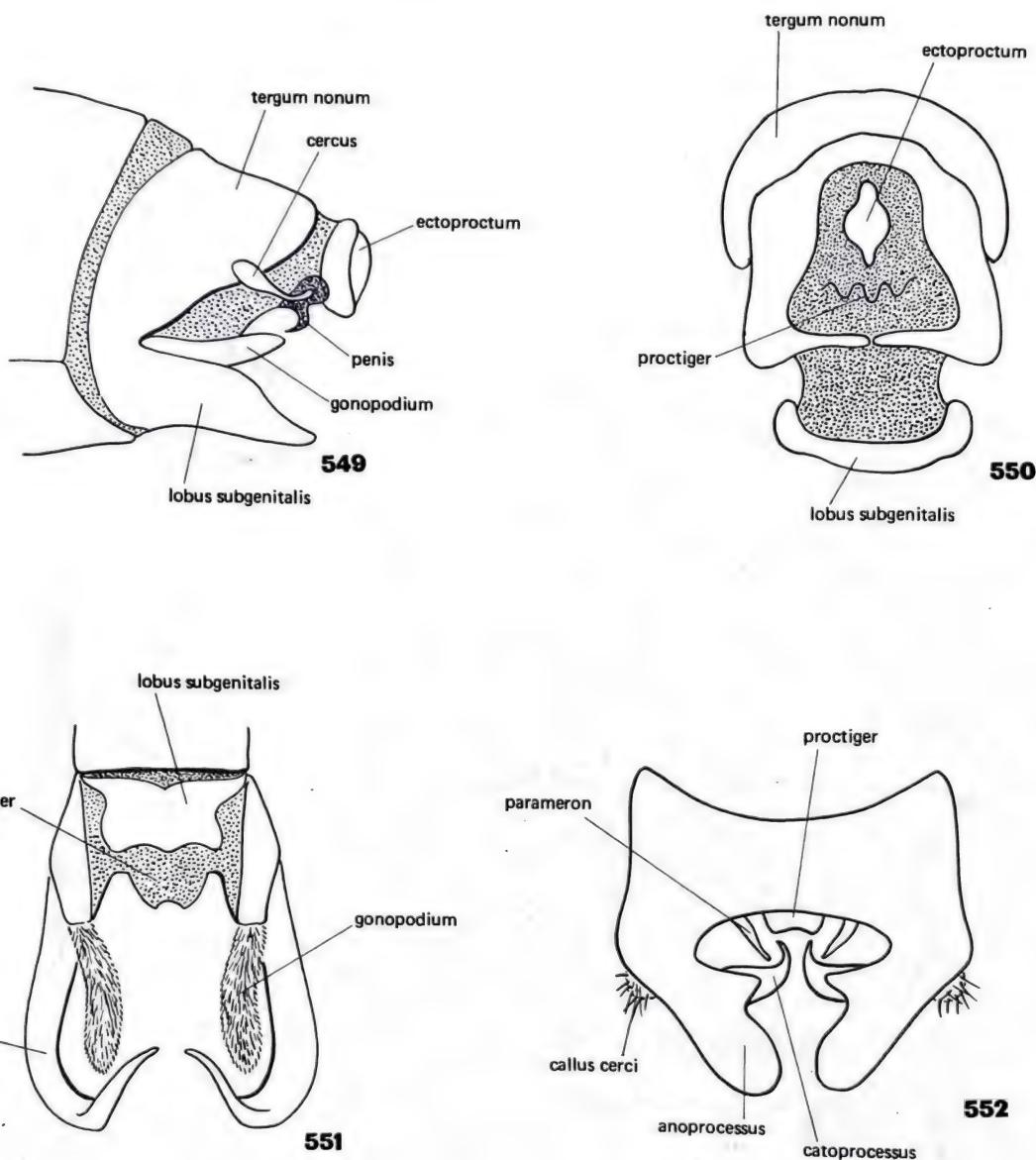
Figs. 531–537. Female genitalia of Hymenoptera. — 531: The two valves of ovipositor of *Cephus* in lateral view, and 532: abdominal end of *Cephus* in lateral view, 533: ovipositor of *Apis* in ventral view, 534: schematic drawing of abdominal end of *Apis* in longitudinal section in lateral view, 535: ovipositor of same removed, 536: ovipositor of *Sirex* in cross-section, and 537: same of *Apis* (after Michener 531–533, and Shvanich 534, 536–537)



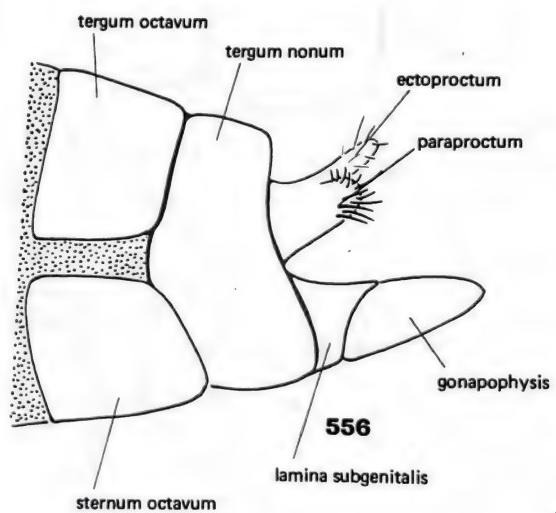
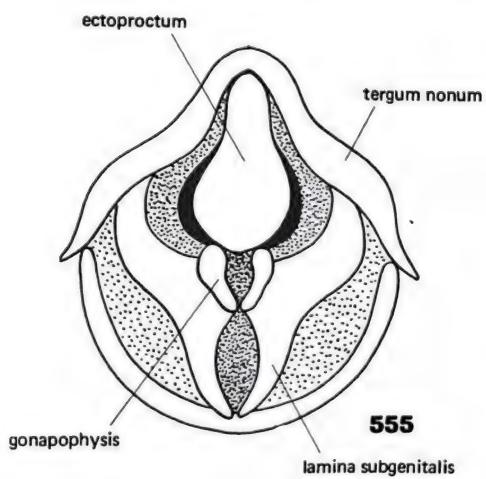
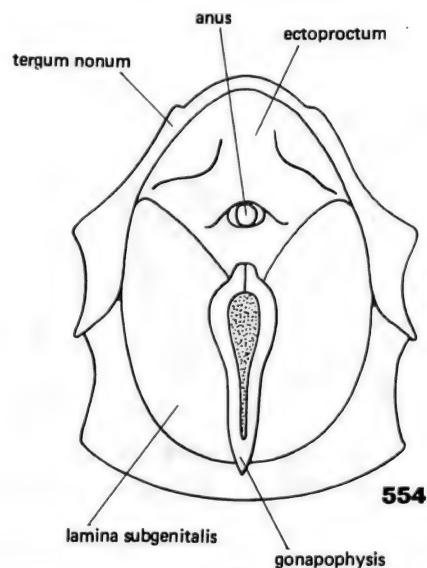
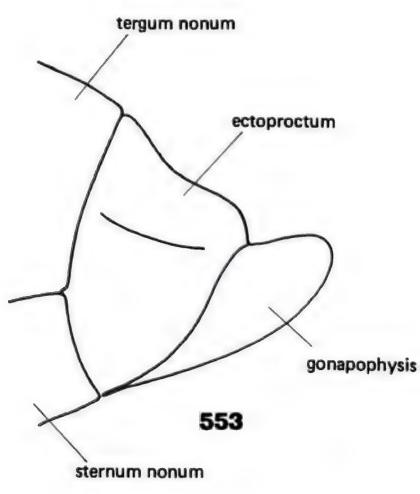
Figs. 538–543. Male and female genitalia of Mallophaga and Anoplura. — 538–539: Copulatory organ of male *Saemundssonia* (Mall.), and *Goniodes* (Mall.). 540: abdominal end of male *Goniodes* in ventral view. — 541–542: Copulatory organ of male *Polyplax* (Anopl.), and *Linognathus* (Anopl.), and 543: abdominal end of female *Pediculus* (Anopl.), in dorsal view (after Cummings 538–539, Nuttall 540, Ferris and Cummings 541, 542, and Terzi 543)



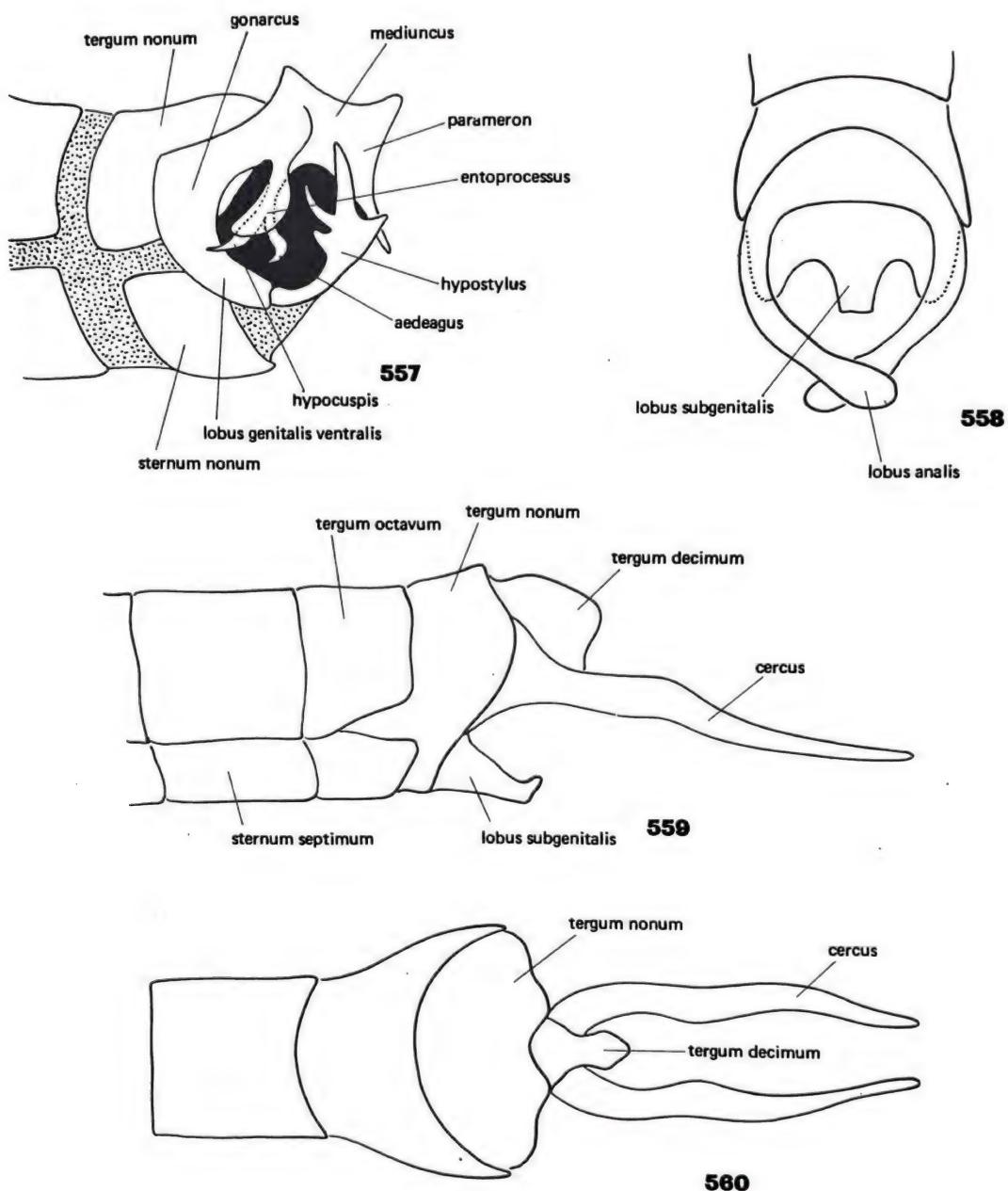
Figs. 544–548. Male and female genitalia of Raphidioptera. — 544: Abdominal end of male *Raphidia* in lateral view, and 545: in posterior view, 546: same of male *Rhaphidilla* in lateral view, 547: ovipositor of *Raphidia* in cross-section, and 548: abdominal end of female *Inocellia* with ovipositor in lateral view (after Steinmann)



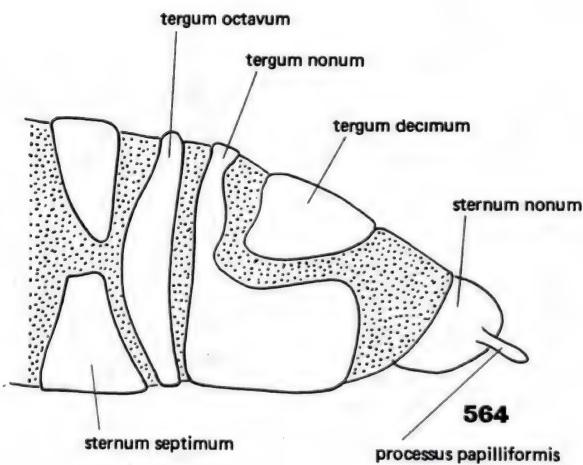
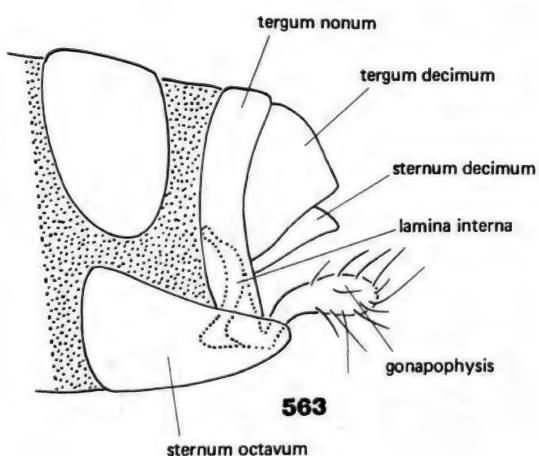
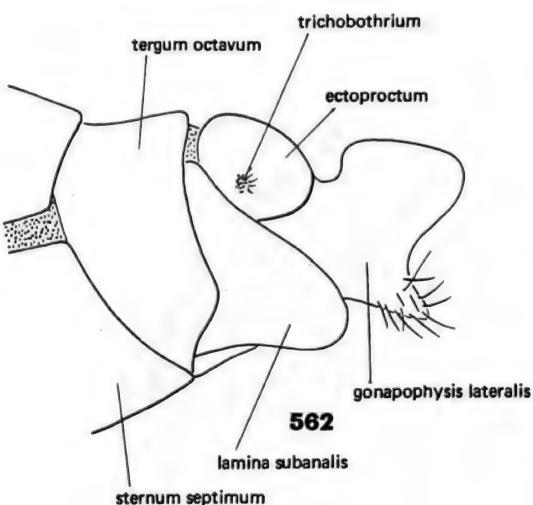
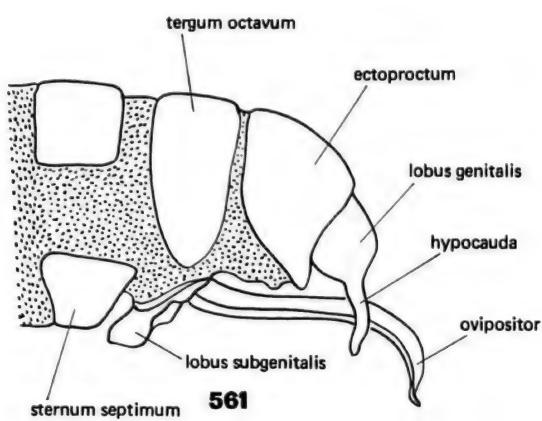
Figs. 549–552. Male genitalia of Megaloptera. — 549–550: Abdominal end of *Sialis* in lateral view, and posterior view, 551: same of *Corydalus* in ventral, and 552: same of *Protohermes* in dorsal view (after Tjeder 549–551, and Weele 552)



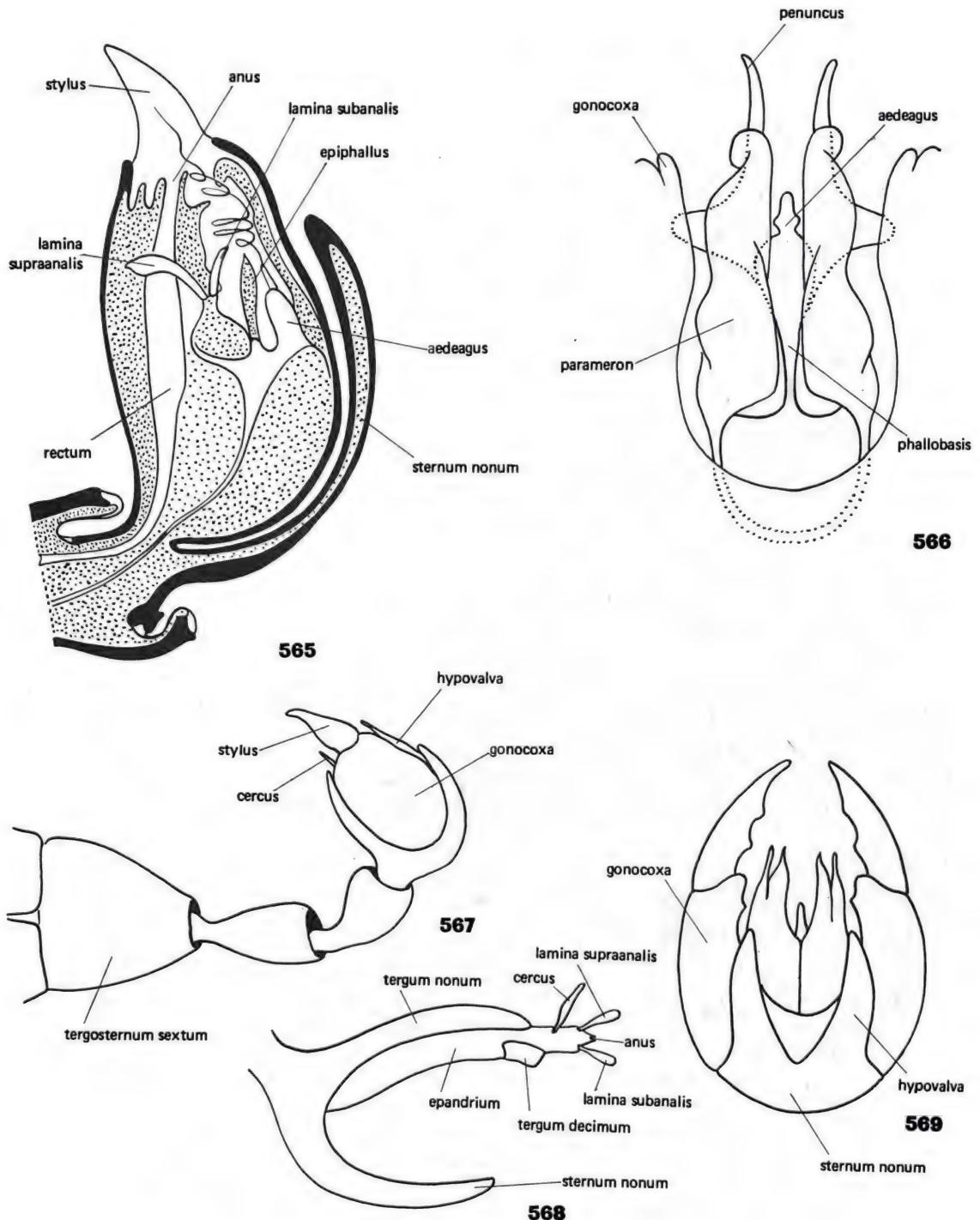
Figs. 553–556. Female genitalia of Megaloptera. — 553: Abdominal end of *Sialis* in lateral, and 554: in posterior view, 555: same of *Corydalus* in posterior, and 556: in lateral view (after Steinmann)



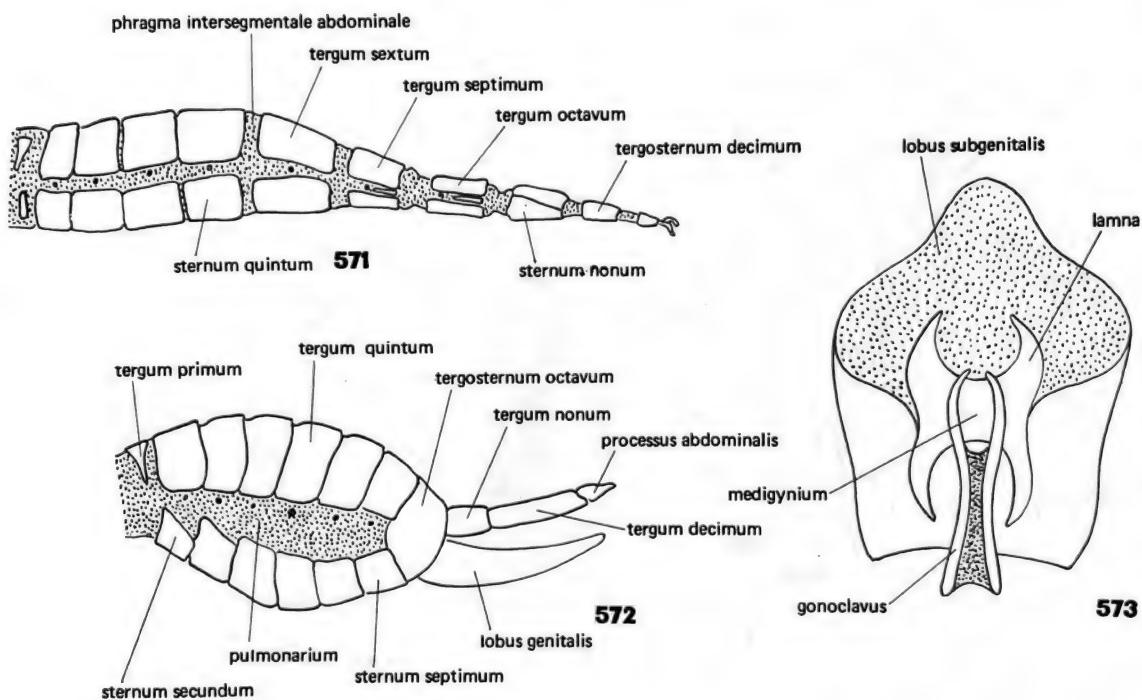
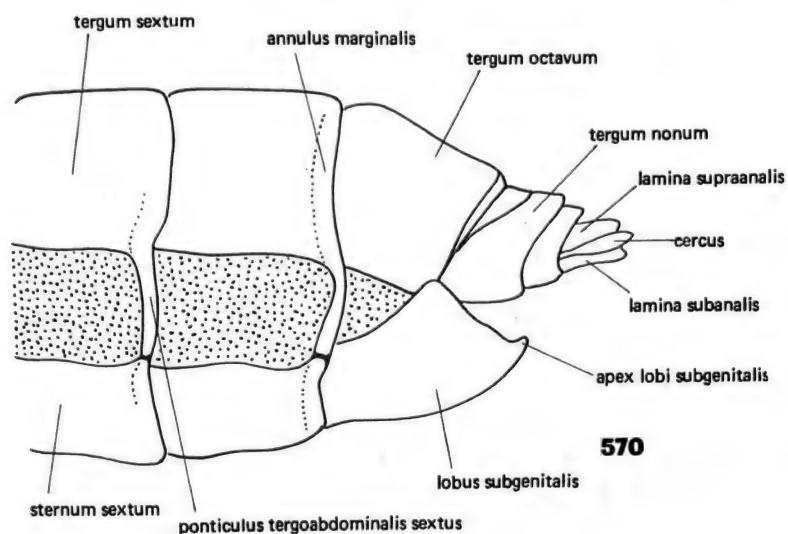
Figs. 557–560: Male genitalia of Neuroptera. — 557: Abdominal end of Nymphes in lateral view, 558: same of Nomoptera in dorsal view, 559–560: same of Acanthaclisis in lateral view, and in dorsal view (after Tjeder 557, 558)



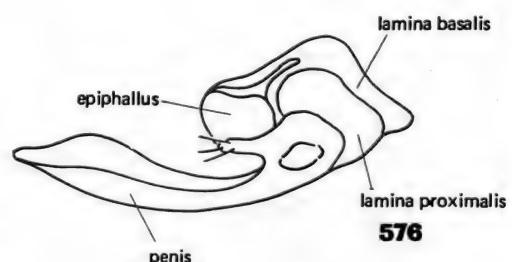
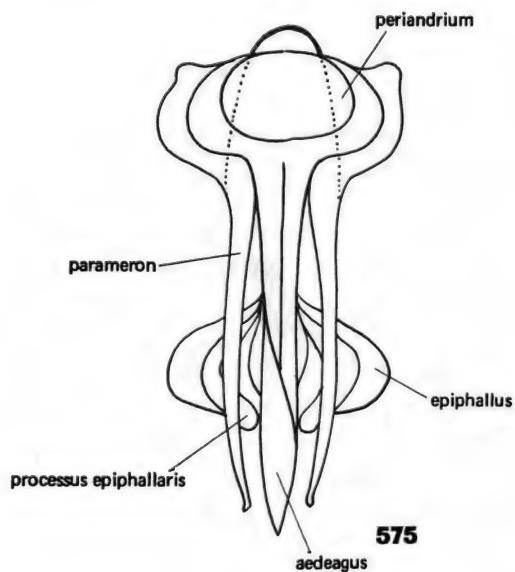
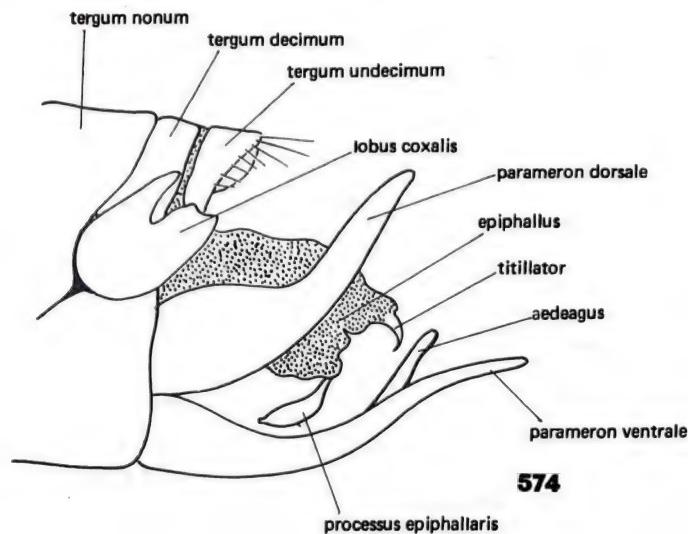
Figs. 561–564. Female genitalia of Neuroptera. — 561: Abdominal end of *Acroberotha*, 562: same of *Ithona*, 563: same of *Coniopteryx*, and 564: same of *Wesmaelius* in lateral view (after Tjeder)



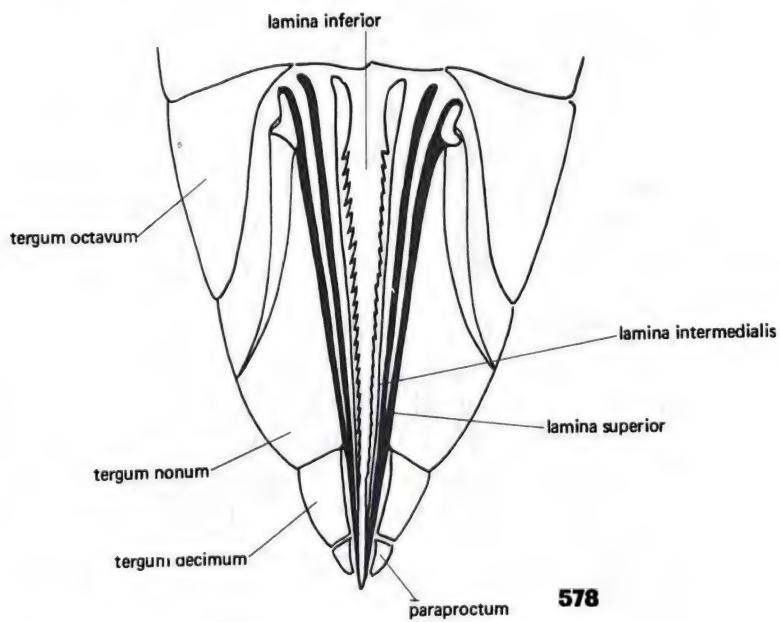
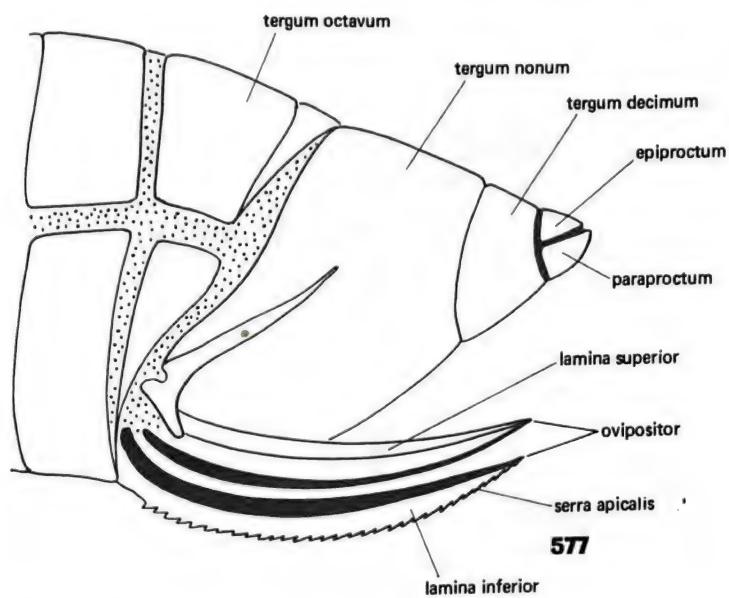
Figs. 565—569. Male genitalia of Mecoptera. — 565: Copulatory organ of *Panorpa* in longitudinal section in lateral view, 566: aedeagus of same in ventral view, 567: abdominal end of *Panorpa* in lateral view, 568: ninth and tenth abdominal segments of same, and 569: apex of abdomen on *Panorpa* in ventral view (after Tjeder)



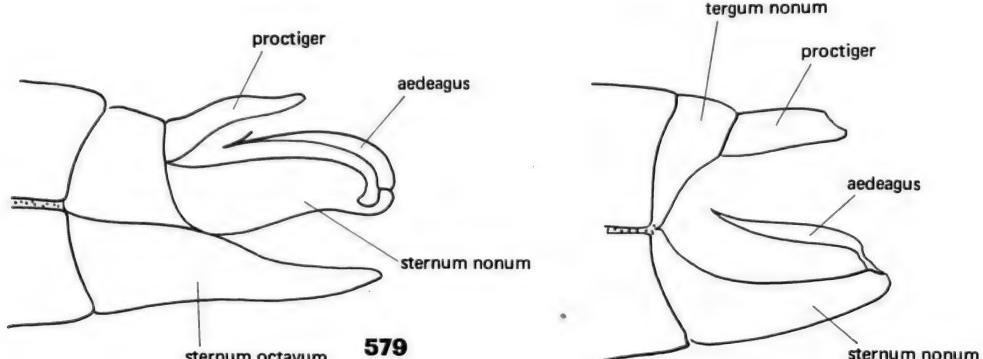
Figs. 570–573. Female genitalia of Mecoptera.— 570: Abdominal end of *Harpobittacus*, 571: abdomen of *Panorpa*, and 572: abdomen of *Boreus* in lateral view, 573: subgenitalia and medigynium of *Panorpa* in dorsal view (after Tjeder)



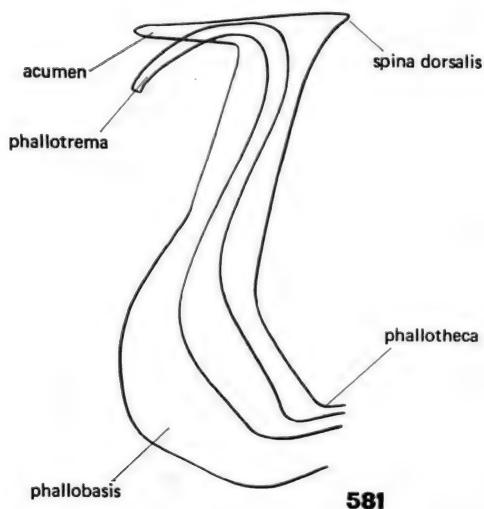
Figs. 574–576. Male genitalia of Thysanoptera. — 574: Abdominal end of Thrips in lateral view, 575: copulatory organ of Thaeniothrips in ventral view, and 576: same of Liothrips in lateral view (after Tuxen 574, and Grassé 575, 576)



Figs. 577–578. Female genitalia of Thysanoptera. — 577: Abdominal end of *Anaphothrips* in lateral view, and 578: same in ventral view (after Melis)



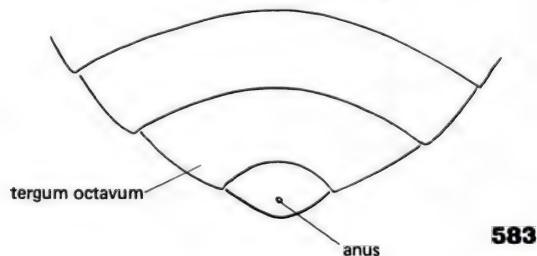
580



581

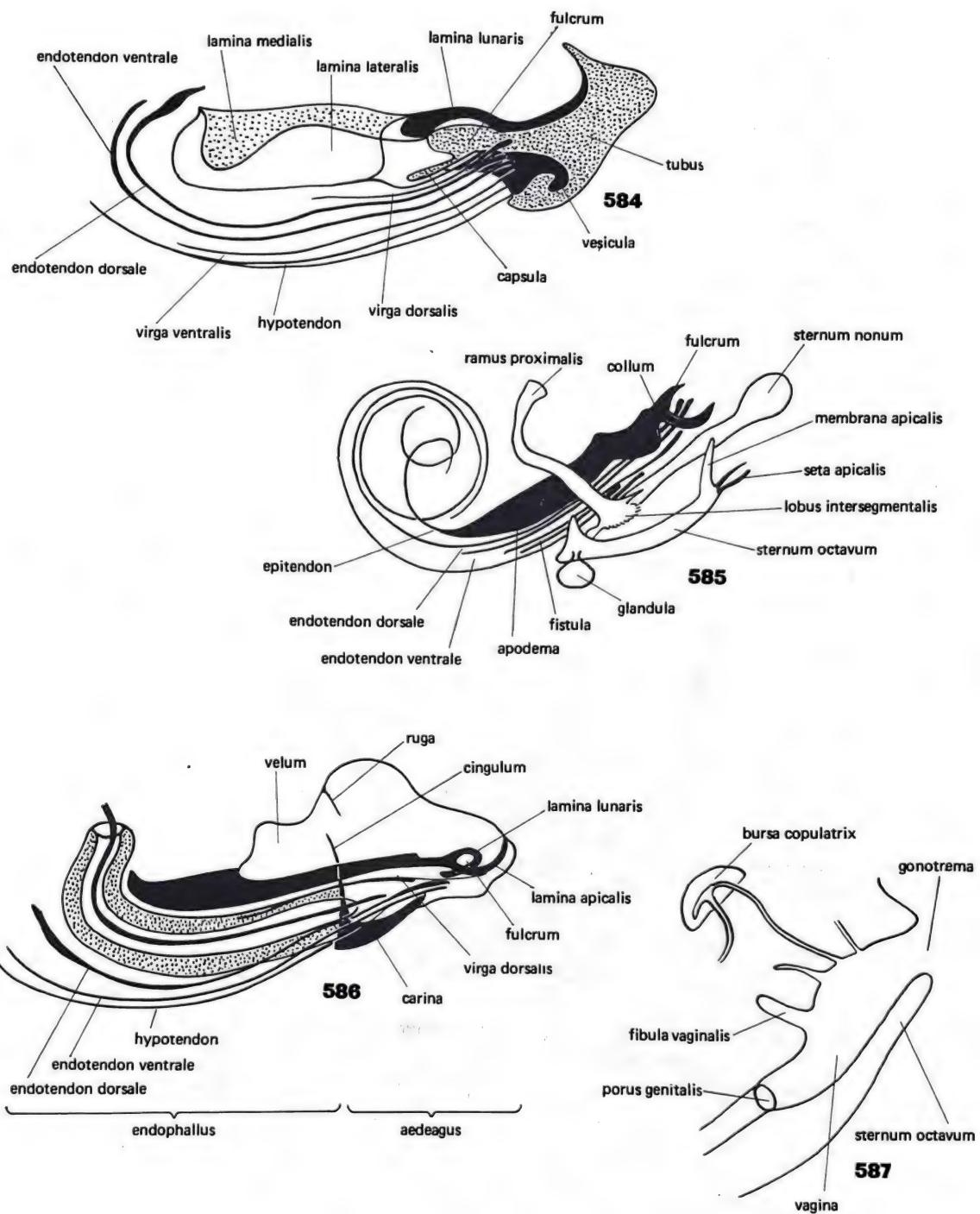


582

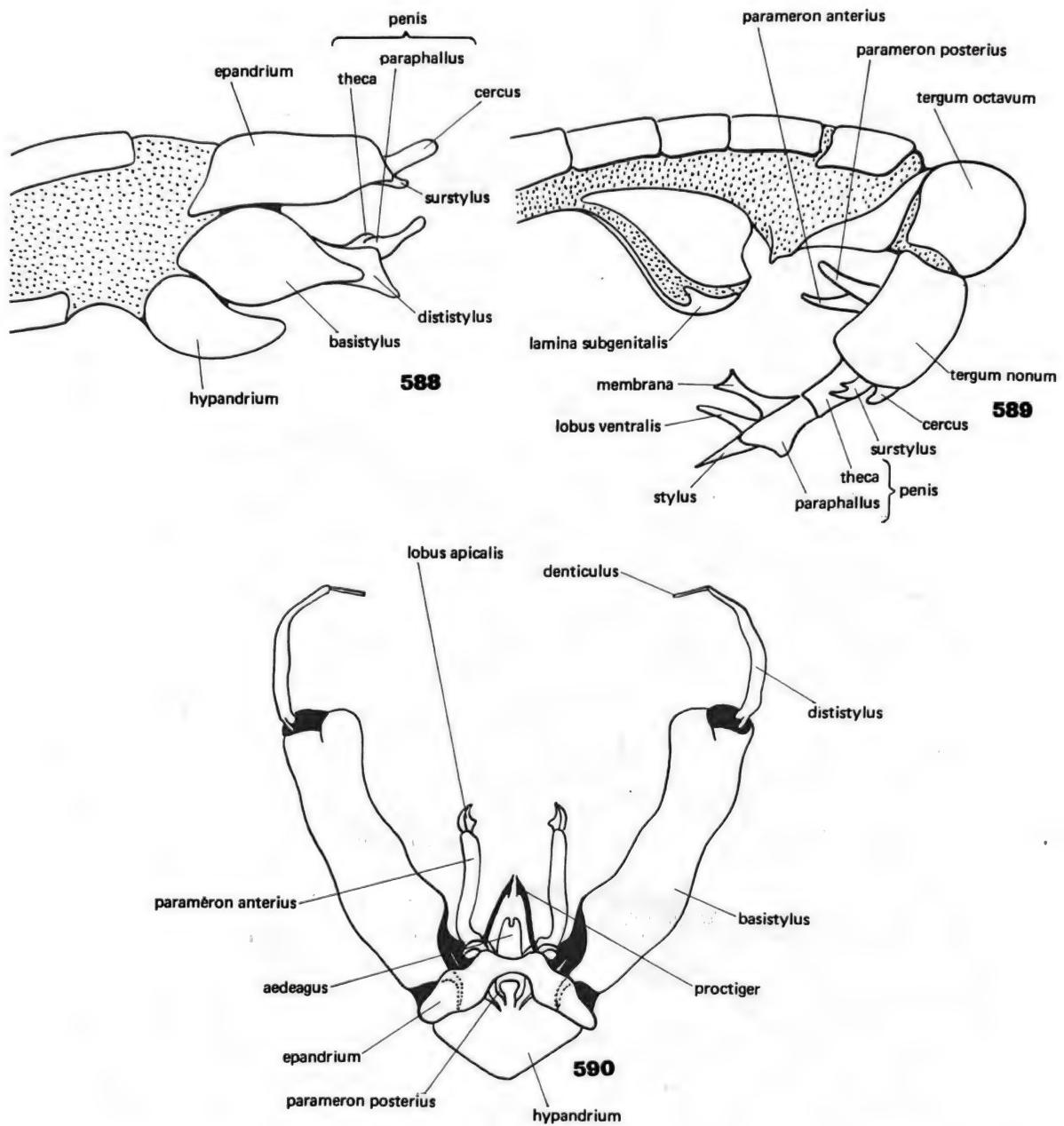


583

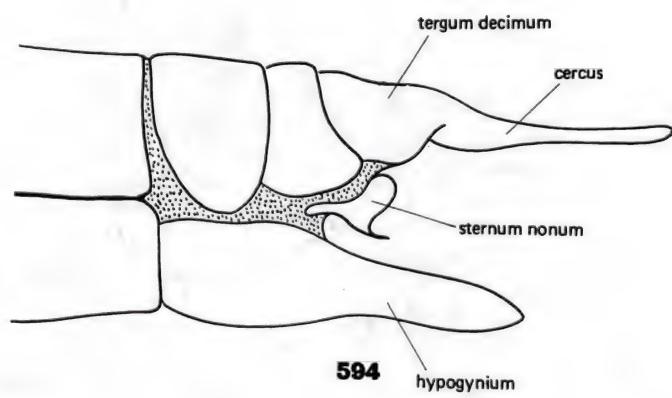
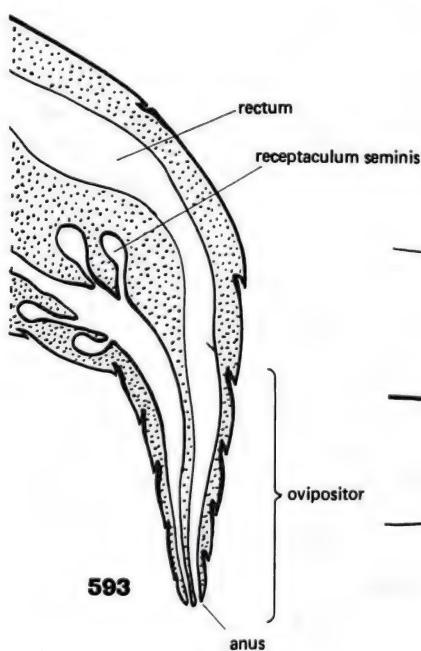
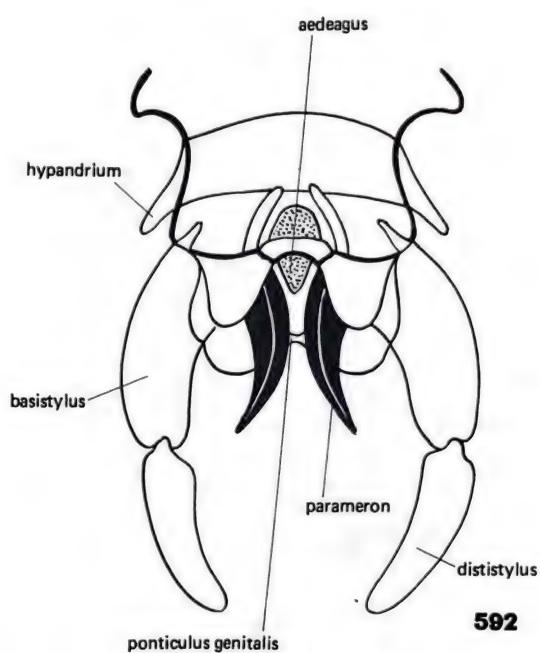
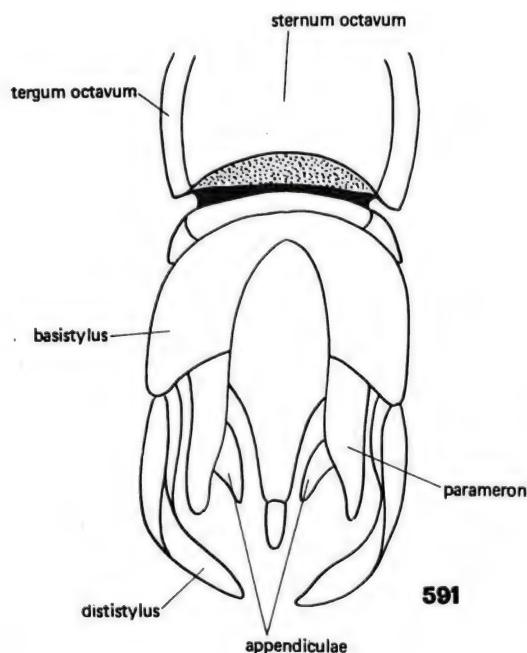
Figs. 579–583. Male and female genitalia of Strepsiptera. — 579: Abdominal end of male *Halictiphagus* in lateral view, and 580: same of *Stenocranophilus* in lateral view, 581: aedeagus of *Xenos*, 582: abdominal end of male *Myrmecolax* in lateral view, and 583: same of female *Eoxenos* in ventral view (after Kaszab and Kinzelbach 581, and Pasteels 579, 580, 582, 583)



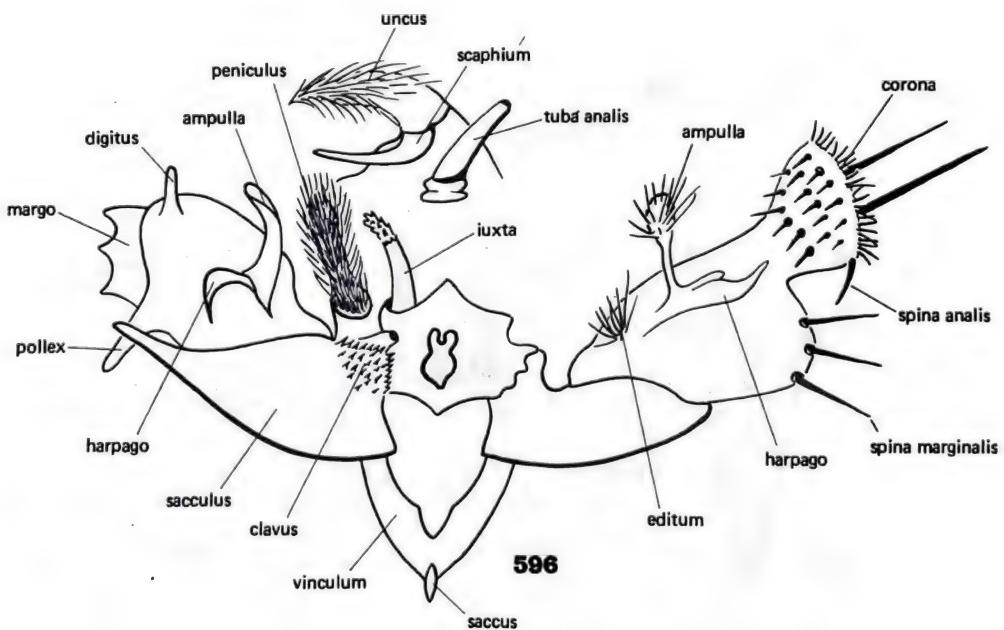
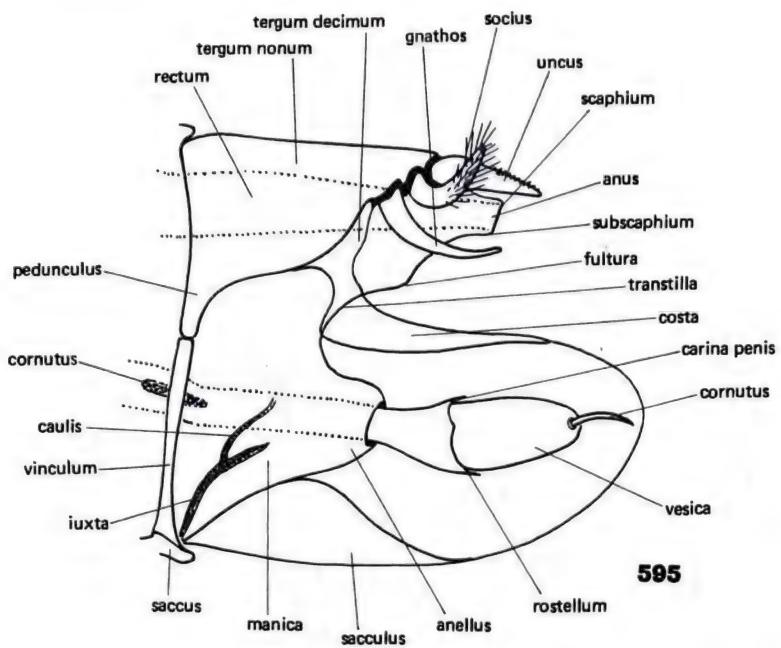
Figs. 584–587. Male and female genitalia of Siphonaptera. — 584: Phallosoma of *Ctenocephalus*, 585: same of *Ceratophyllus*, and 586: same of *Euctenophthalmus*, and 587: schematic view of female's genitalia (after Wenk 584, 585, 587, and Pens 586)



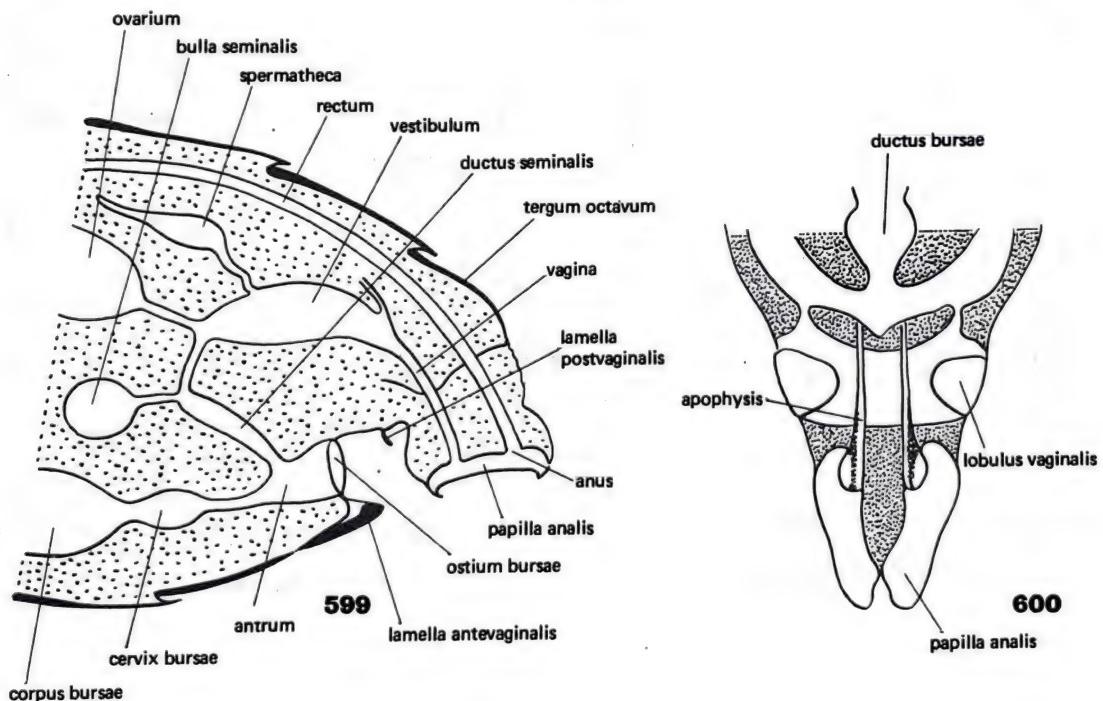
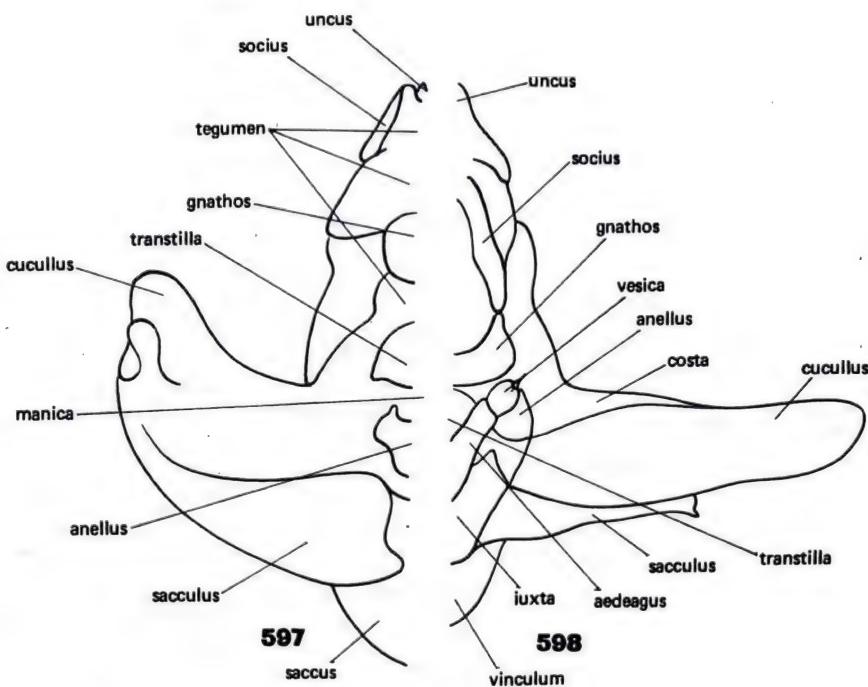
Figs. 588—590. Male genitalia of Diptera. — 588: Abdominal end of *Dioctria*, and 589: same of *Sarcophaga* in lateral view, 590: copulatory organ of *Aedes* in dorsal view (after Emden et Hennig)



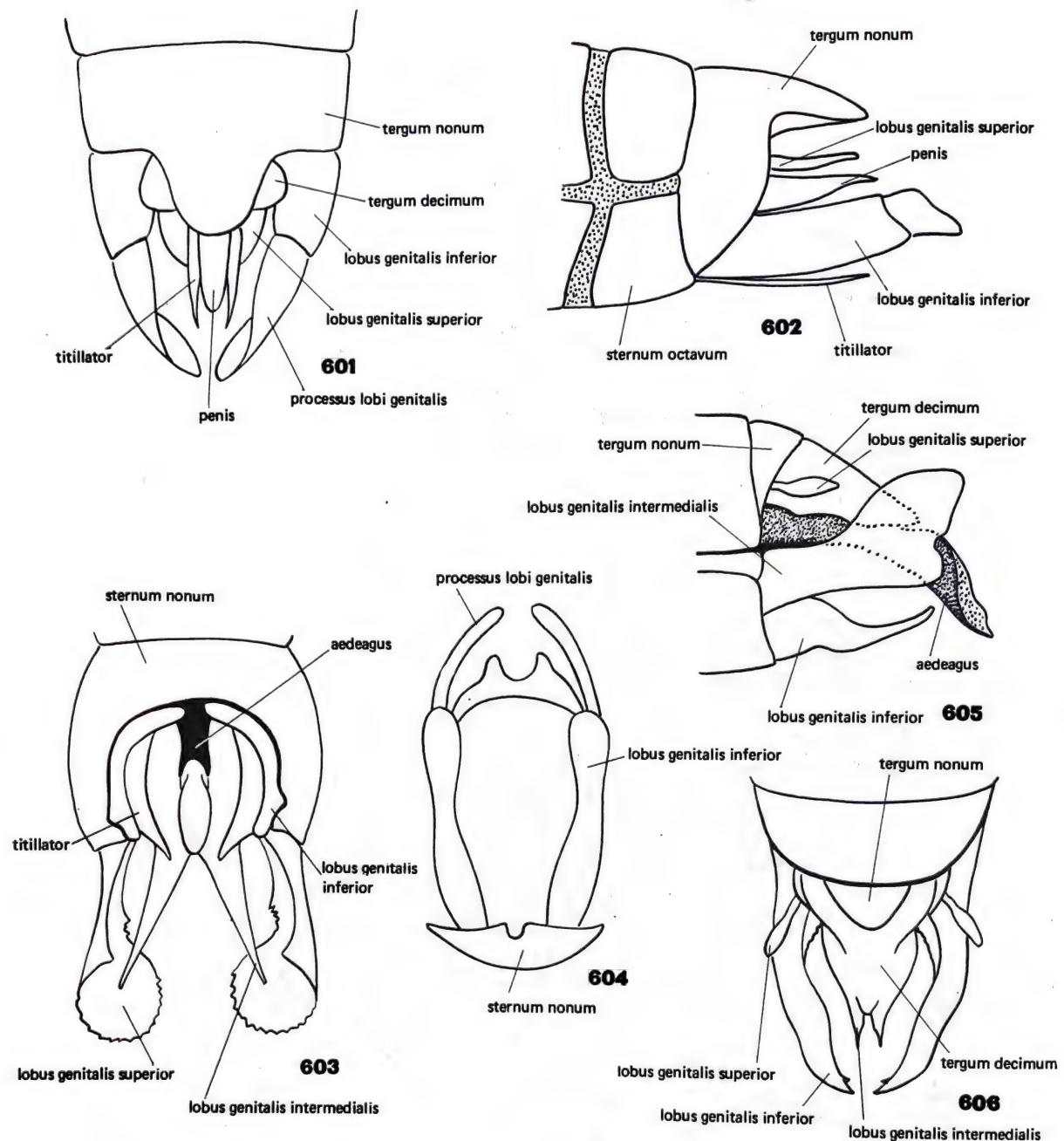
Figs. 591–594. Male and female genitalia of Diptera. — 591: Hypopygium of male *Tendipes* in ventral view, and 592: same of male *Trichocera* in dorsal view, 593: abdominal end of *Musca* in longitudinal section in lateral view, and 594: same of *Tipula* in lateral view (after Emden et Hennig)



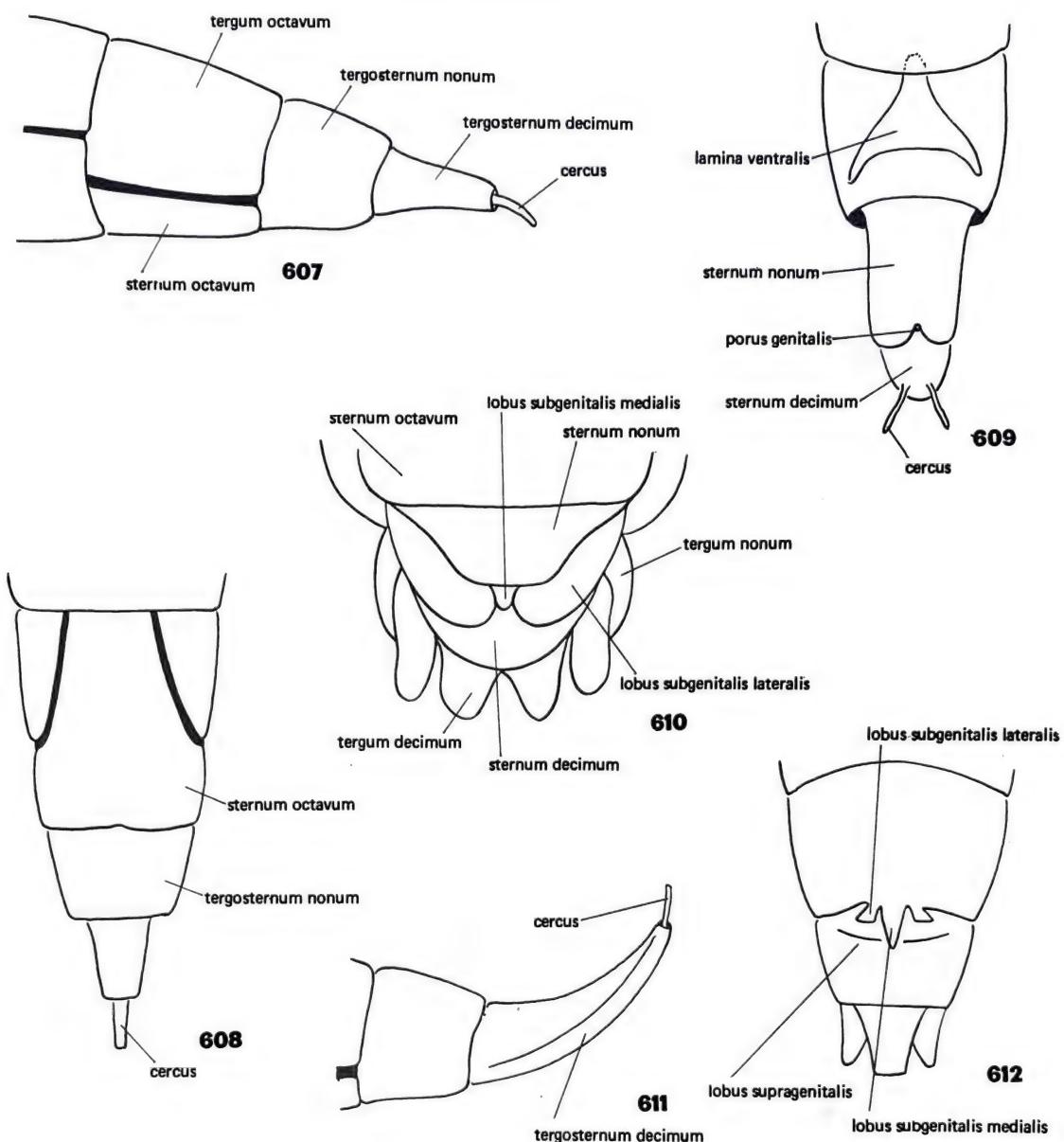
Figs. 595–596. Male genitalia of Lepidoptera. — 595: Diagrammatic representation of the abdominal end, 596: copulatory organ of the Noctuid type (after Klots 595, and Pierce 596)



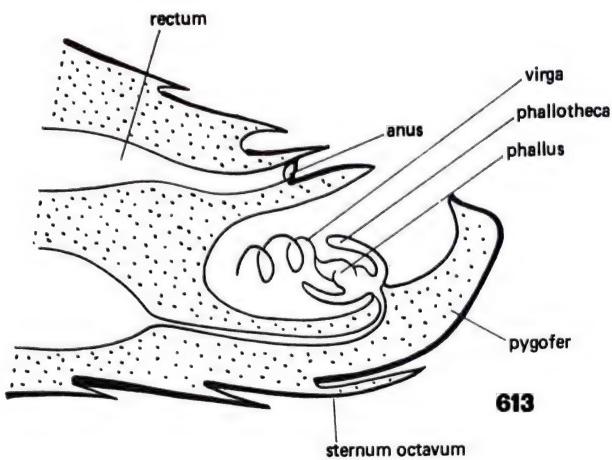
Figs. 597–600. Male and female genitalia of Lepidoptera. — 597–598: Copulatory organ of the male *Agonopteryx*, and *Cnephasis*, 599: diagrammatic representation of female abdominal end in longitudinal section in lateral view, and 600: abdominal end of female *Rhacodia* in ventral view (after Clarke 597, 598, Klots 599, and Busck 600)



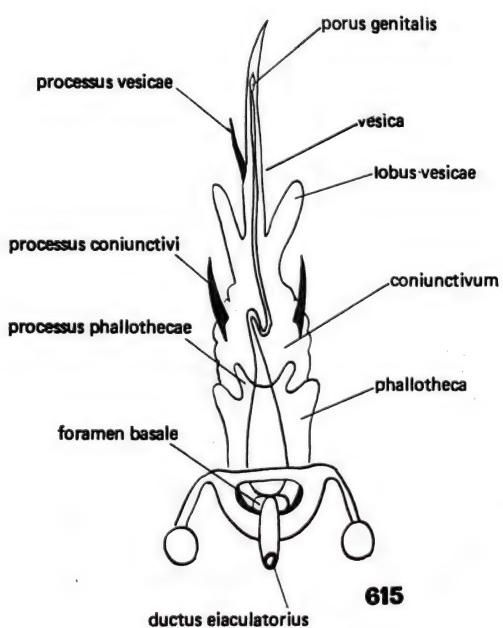
Figs. 601–606. Male genitalia of Trichoptera. — 601–602: Abdominal end of *Rhyacophila* in dorsal and lateral view, 603: same of *Limnephilus*, and 604: same of *Hydropsyche* in ventral view, 605–606: same of *Sericostoma* in lateral and dorsal view (after Nielsen 605, 606)



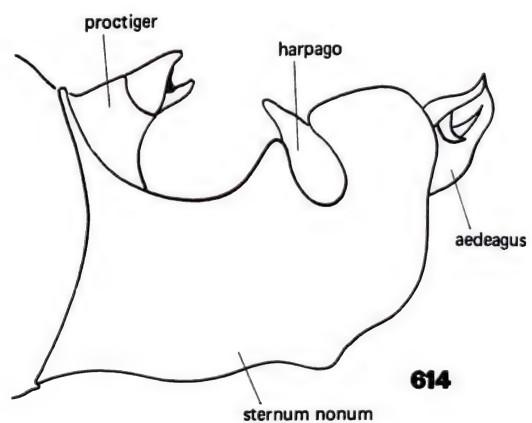
Figs. 607–612. Female genitalia of Trichoptera. — 607–608: Abdominal end of *Rhyacophila* in lateral and ventral view, 609: same of *Hydroptila*, and 610: same of *Sericostoma* in ventral view, 611: same of *Allotricha* in lateral view, and 612: same of *Limnephilus* in ventral view (after Nielsen 610, 612)



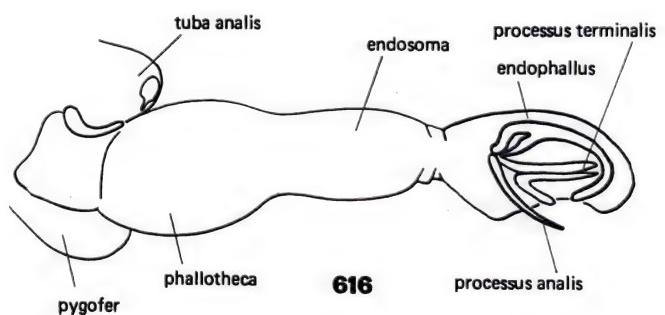
613



615

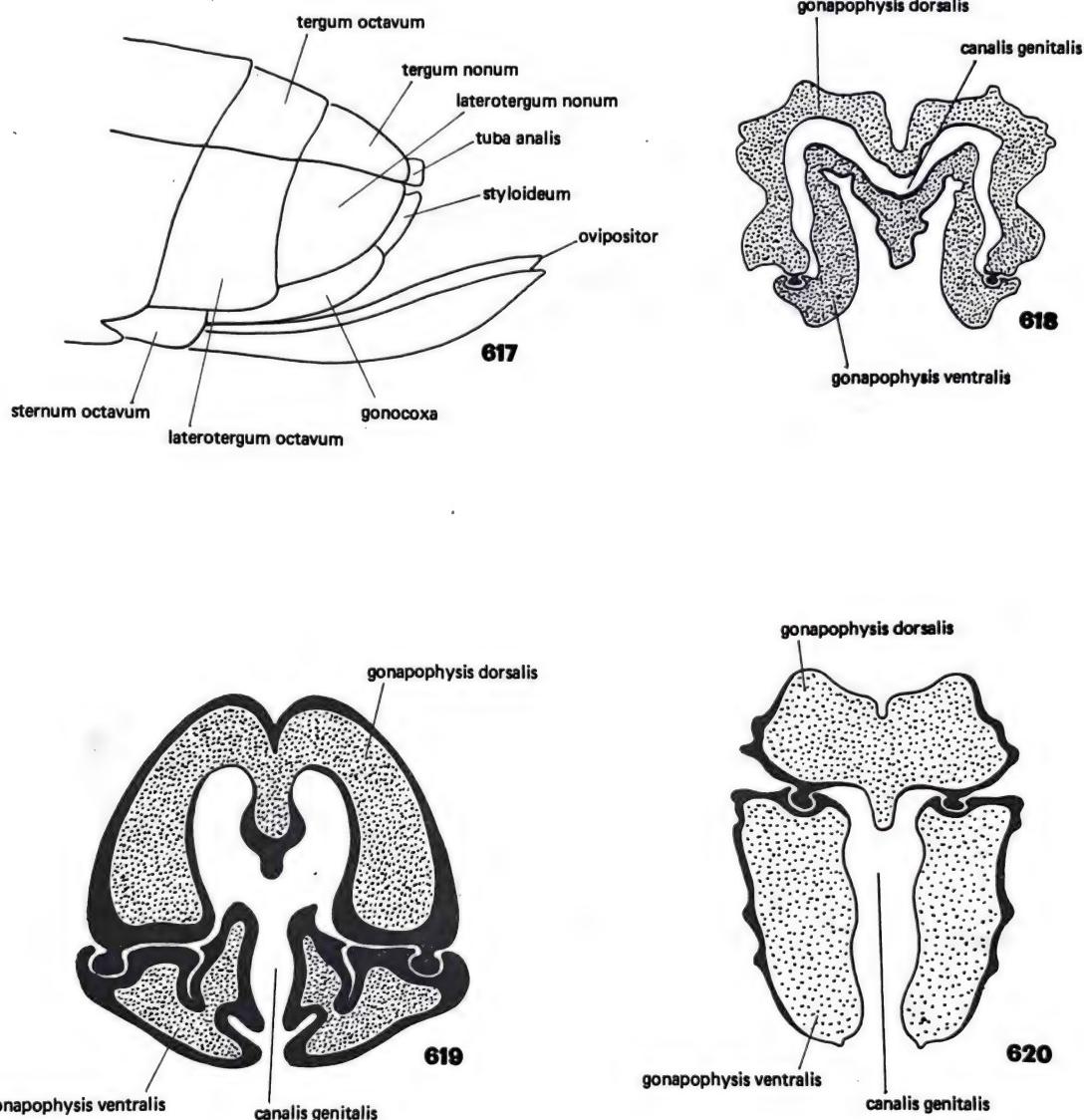


614

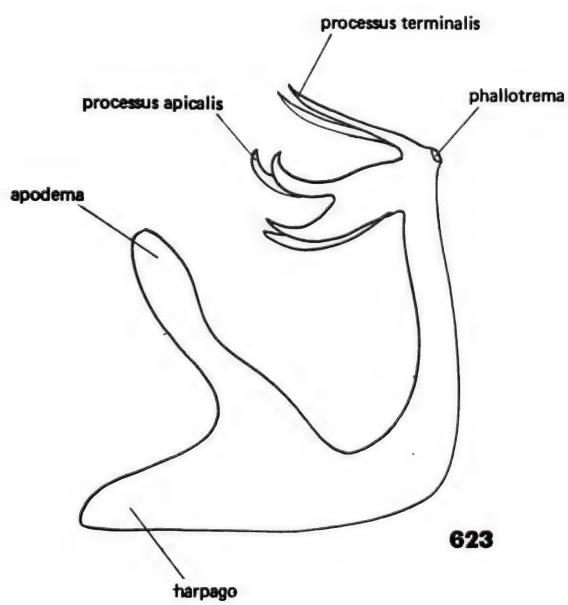
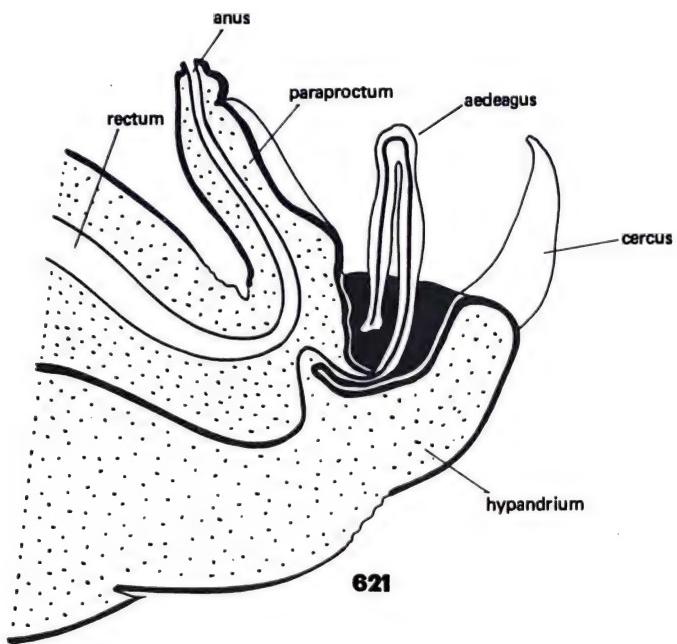


616

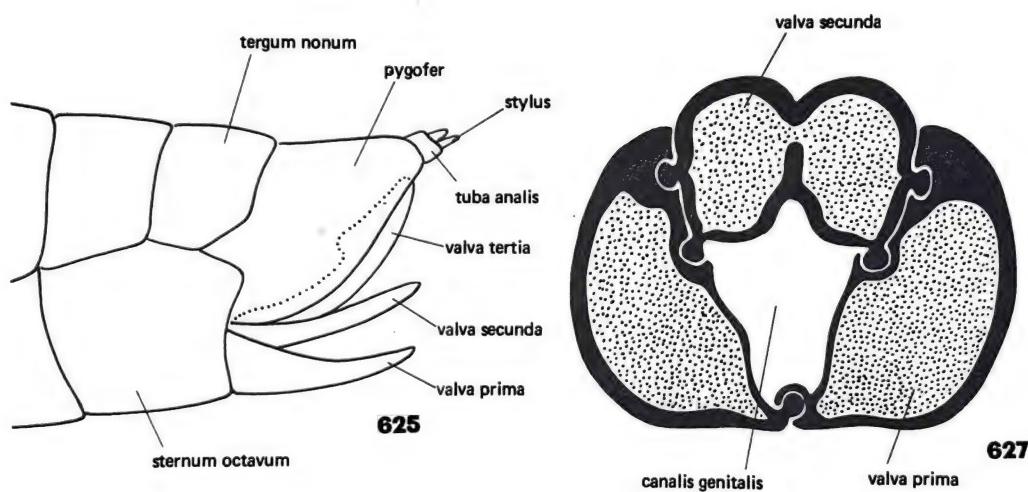
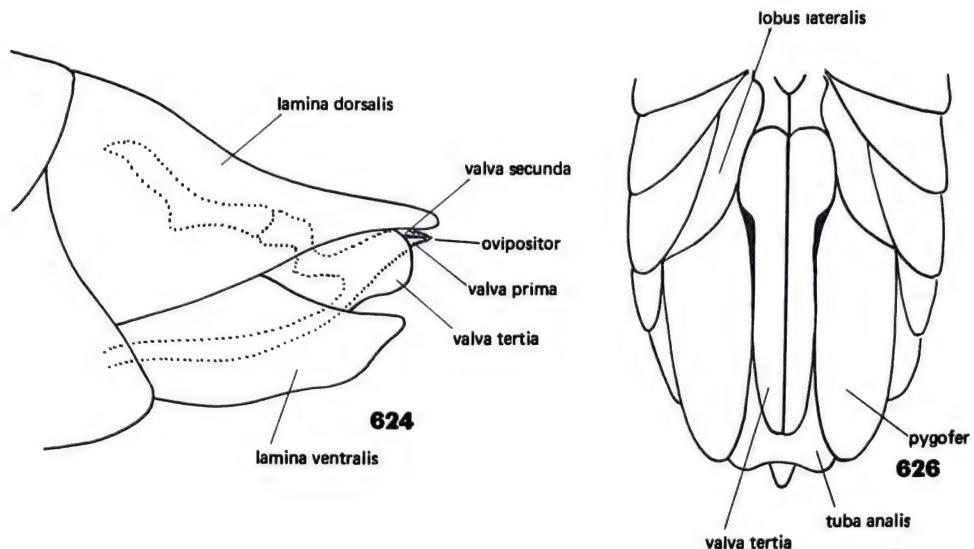
Figs. 613–616. Male genitalia of Heteroptera. — 613: Schematic drawing of the abdominal end in longitudinal section in lateral view, 614: copulatory organ of *Notonecta* in lateral view, 615: schematic phallus in detail, and 616: phallus of *Nabis* in lateral view (after Snodgrass 613, Hullenberg 614, 615 and Tuxen 616)



Figs. 617–620. Female genitalia of Heteroptera. — 617: Schematic drawing of the abdominal end in lateral view, 618–620: cross-section of the ovipositor of 618: *Lygaeus*, 619: *Tibicen*, and 620: *Naucoris* (after Ekblom 617, Weber 618, and Larsen 619, 620)



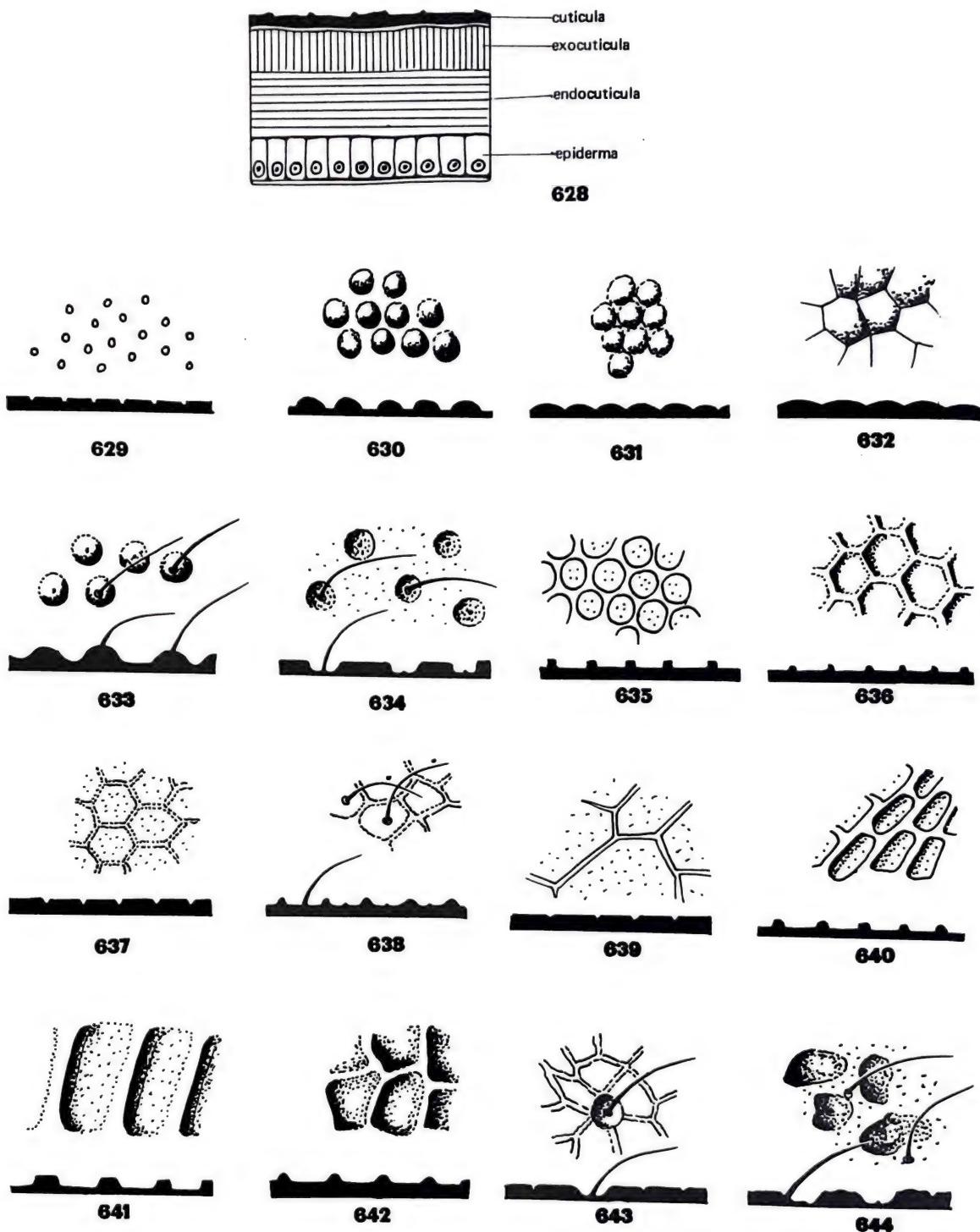
Figs. 621–623. Male genitalia of Homoptera. — 621: Schematic drawing of the abdominal end in longitudinal section in lateral view, 622: aedeagus in cross-section, and 623: aedeagus of *Typhlocyba* in lateral view (after Weber 621, 622, and Russell 623)



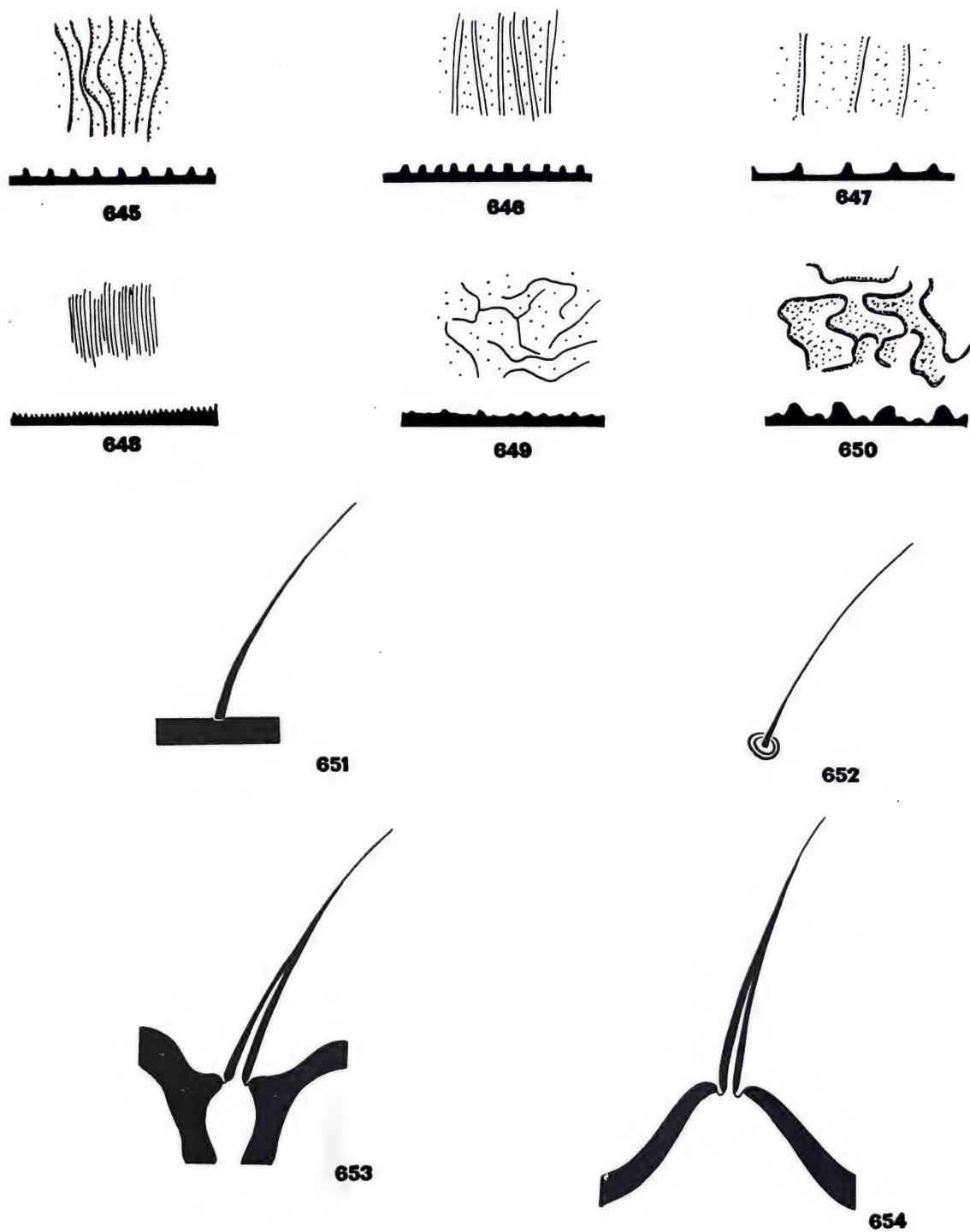
Figs. 624–627. Female genitalia of Homoptera. — 624: Abdominal end of *Psylla* in lateral view, 625: same of *Athysanus* in lateral view, 626: same of *Delphax* in ventral view, and 627: cross-section of the ovipositor of *Magicicada* (after Russell 624–626, and Shvanvich 627)



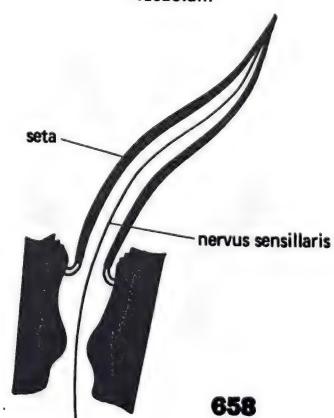
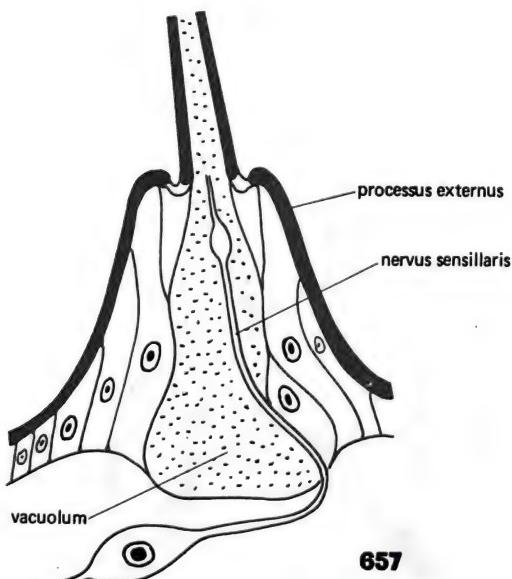
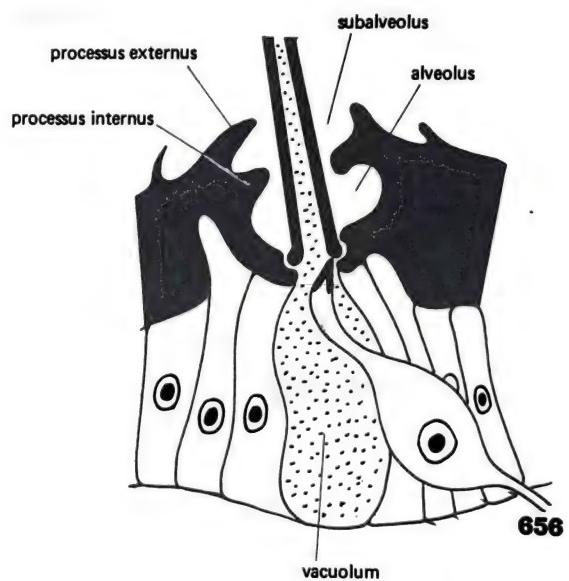
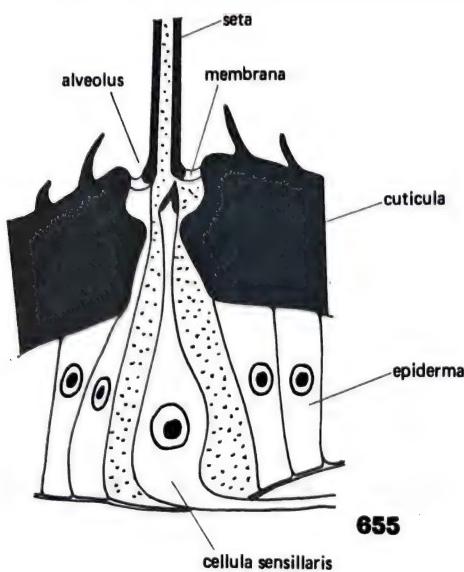
# APPENDIX



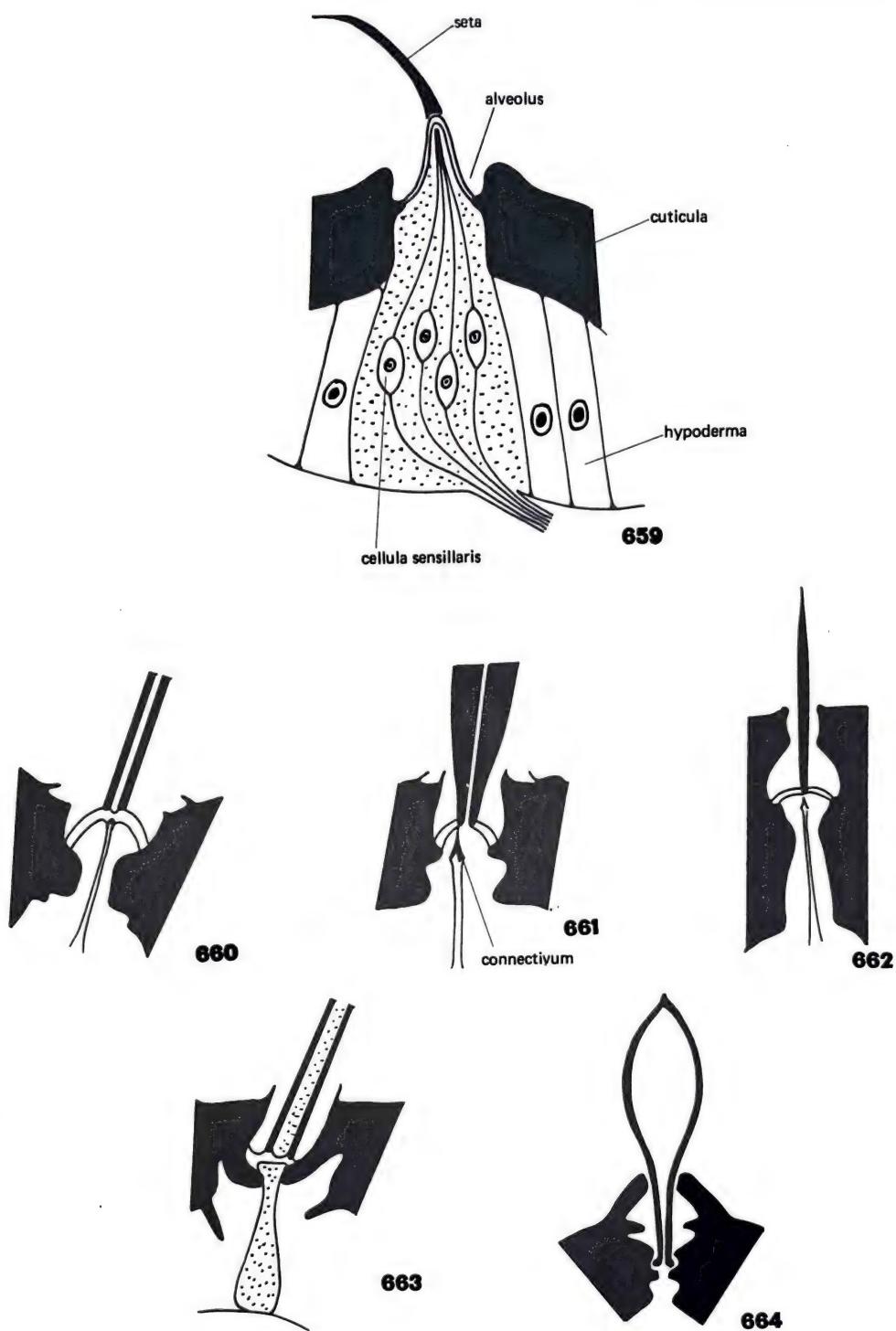
Figs. 628–644. The structure of the body wall. — 628: Cross-section of the body wall. — 629–644: Noncellular cuticular process (*processus cuticularis noncellularis*) or microsculpture (*microsculptura*), 629: punctulate, 630: pustulate, 631: granulate, 632: reticulate-coriaceous, 633: papillate, with hairs, 634: punctate, with hairs, 635: punctate-reticulate, 636: reticulate, 637: foveolate, 638: rugose-punctate, 639: alutaceous, 640: scaly reticulate, 641: canaliculate, 642: reticulate-rugose, 643: coriaceous, with puncture and hair, and 644: foveate (after Eady)



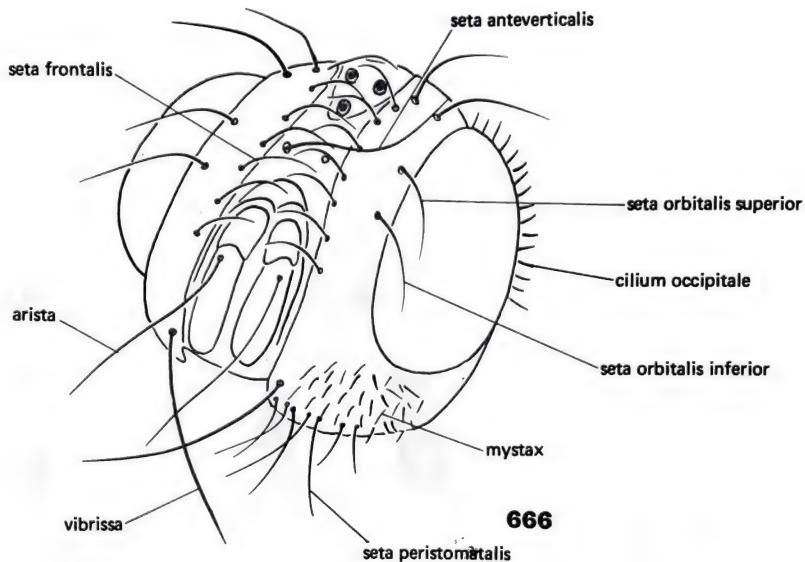
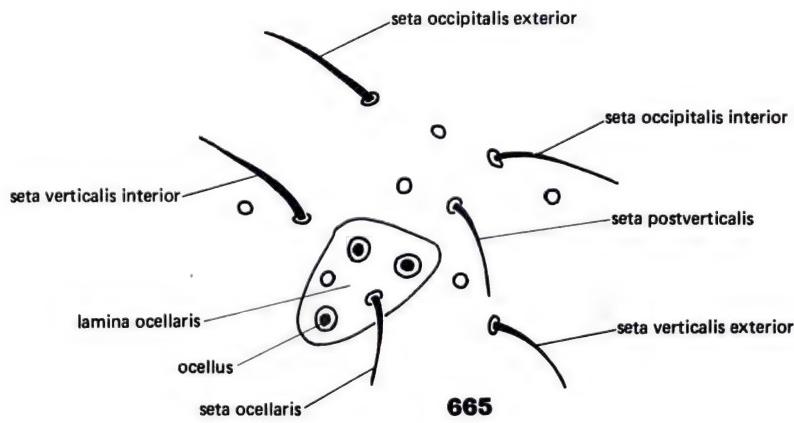
Figs. 645–654. Noncellular and unicellular cuticular processes. — 645–650: Microsculpture, 645: strigose, 646: striate, 647: strigate, 648: aciculate, 649: rugulose, and 650: rugose. — 651–654: Unicellular cuticular process (*processus cuticularis unicellularis*), 651: the fine hair (cilium), 652: the hair (pilus), 653: bristle (seta) emitted from a pit, and 654: same emitted from a process (after Eady 645–650)



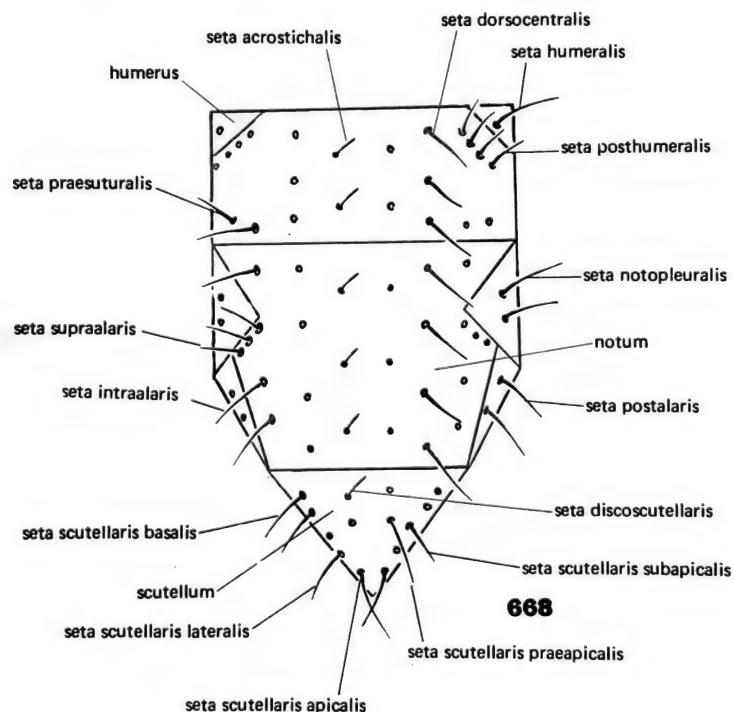
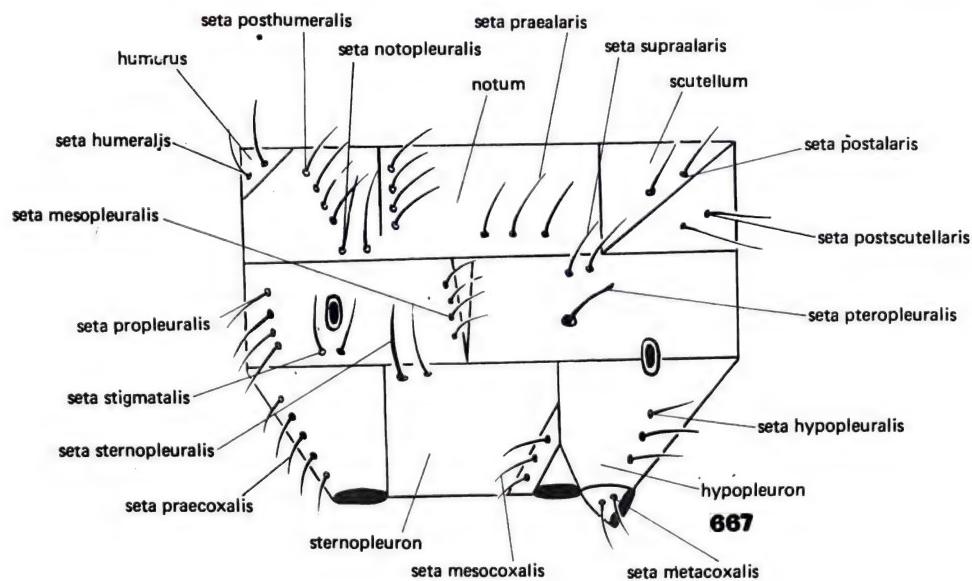
Figs. 655–658. Sensilla trichodea. — 655: The simple hair sensillum (sensillum epidermatale), 656: the sensillum with intraepidermal sense cell (sensillum intraepidermatale), 657: the sensillum with subepidermal sense cell (sensillum subepidermatale), and 658: seta with sensory nerve (after Snodgrass)



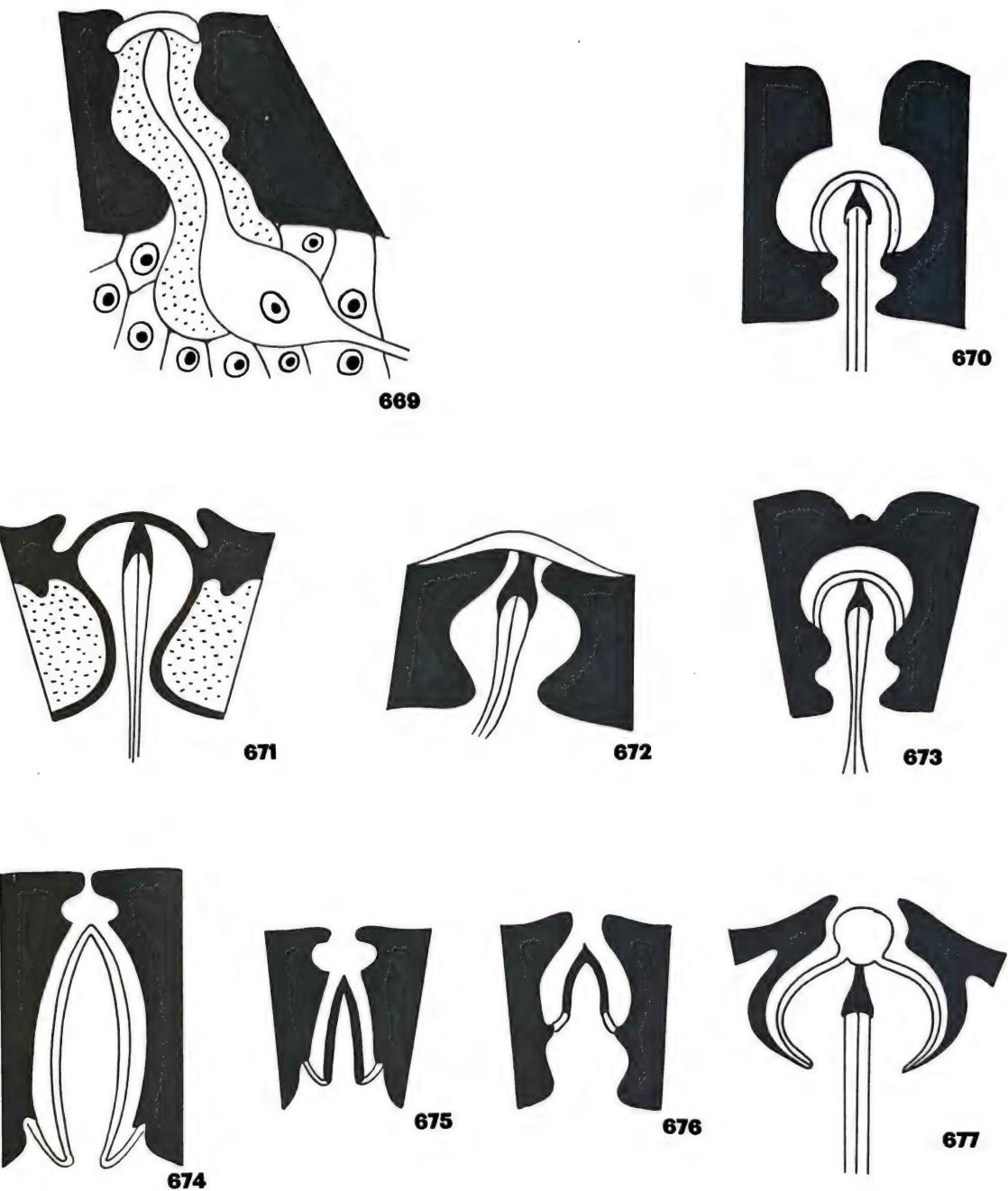
Figs. 659–664. Setal sensilla. — 659: Chemoreceptive seta with multiple sense cells. — 660–664: Some cuticular formations with sensory hairs in cross-section (after Sihler 659, and Snodgrass 660–664)



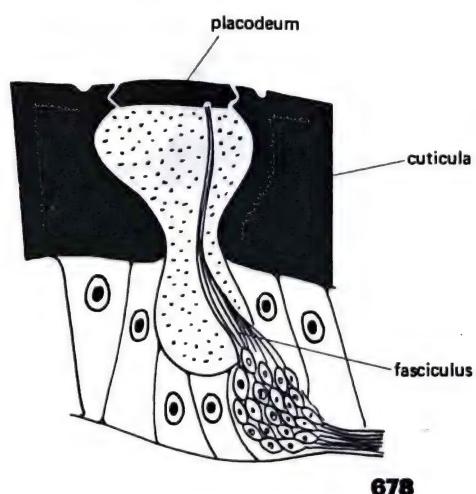
Figs. 665–666. The chaetotaxy of the head. — 665: The setal configuration of the ocellar plate and its environs, and 666: same of a Diptera head in half profile (after Mihályi)



Figs. 667–668. The chaetotaxy of the thorax. — 667: The setal configuration in lateral, and 668: same in dorsal view



Figs. 669–677. The campaniform organs. — 669: The structure of the sensory organ in cross-section. — 670–677: Some cuticular formations in cross-section (after Newton 669, Hochreuther 670, 673, Snodgrass 671, 674, 675, 676, and Pflügstadt 672, and 677)



678



679



680



681



682

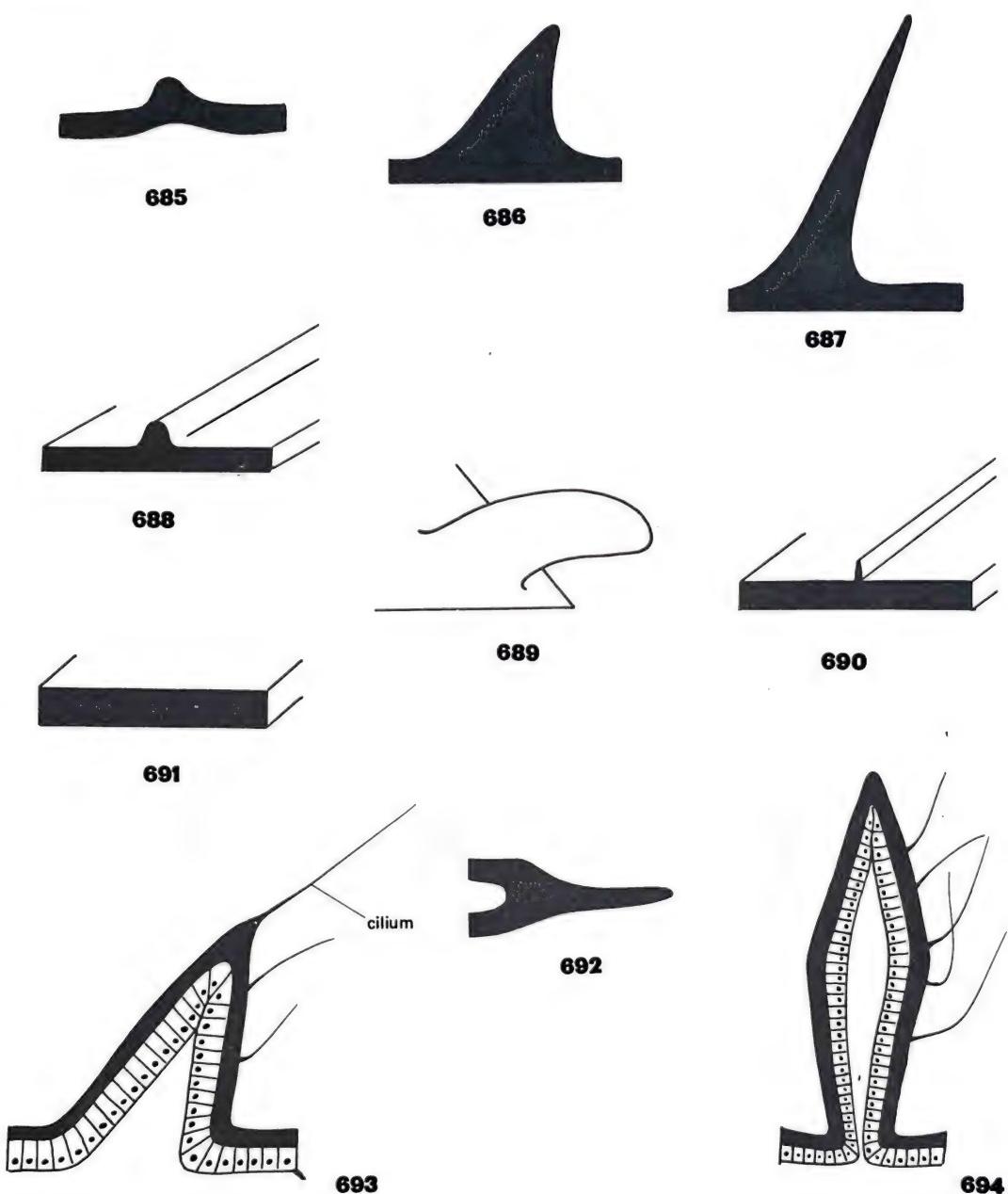


683

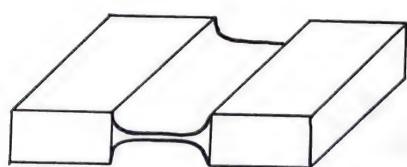


684

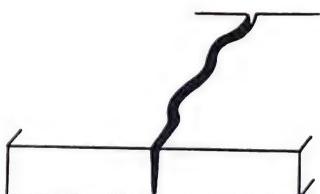
Figs. 678–684. The plate organs. — 678: The structure of the sensory organ in cross-section. — 679–684: Some cuticular formations in cross-section (after Snodgrass 678, 683, Hochreuther 679, 680, Rath 681, and Ruland 682, 684)



Figs. 685–694. Multicellular external process (*processus externalis multicellularis*). — 685: The fastigium (fastigium), 686: denticle (denticulus), 687: spine (spina), 688: keel (carina), 689: lobe (lobus), 690: line (linea), 691: plate (lamina), 692: crown (corona), 693: spiniform process, and 694: lanceolate process (after Snodgrass 693, 694)



695



696



697



698



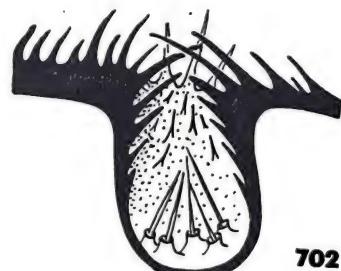
699



700

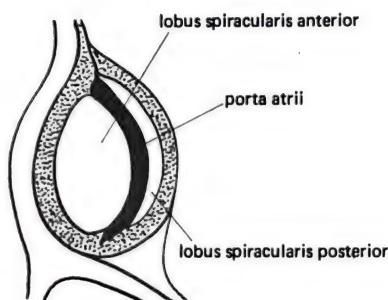


701

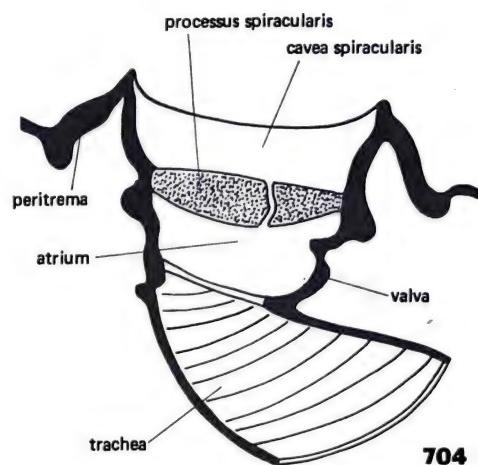


702

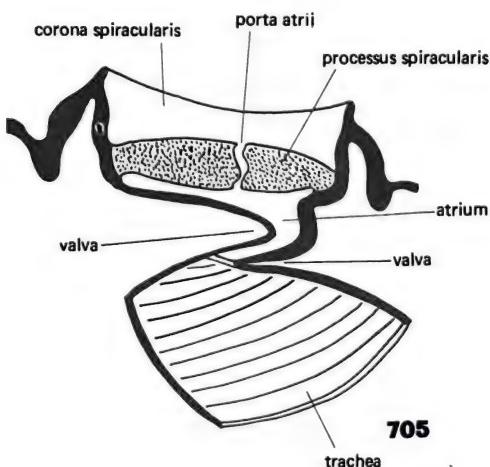
Figs. 695–702. Multicellular internal process (*processus internalis multicellularis*). — 695: Wide suture, 696: narrow suture, 697–698: the two types of channels (*canalis*), 697: canals, simple and 698: dilating, 699: bridge (*ponticulus*), 700: cavity (*cavea*), 701: cavern (*caverna*), and 702: sensory pit (*caverna sensillaris*) (after Grassé 702)



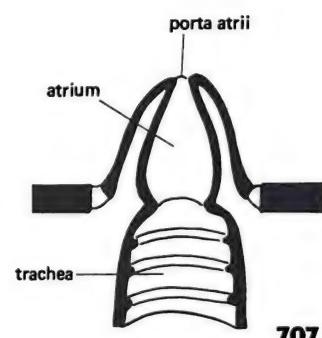
703



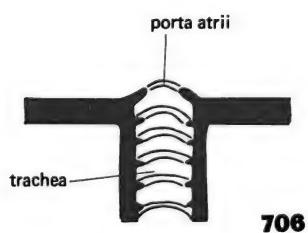
704



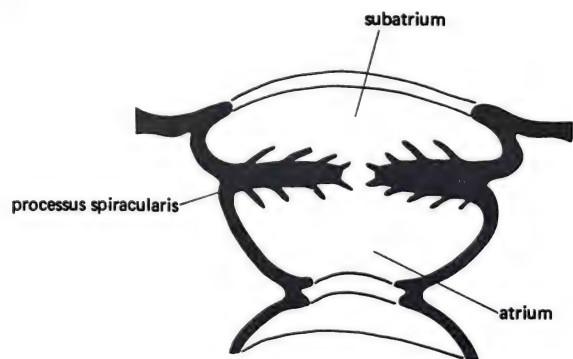
705



707

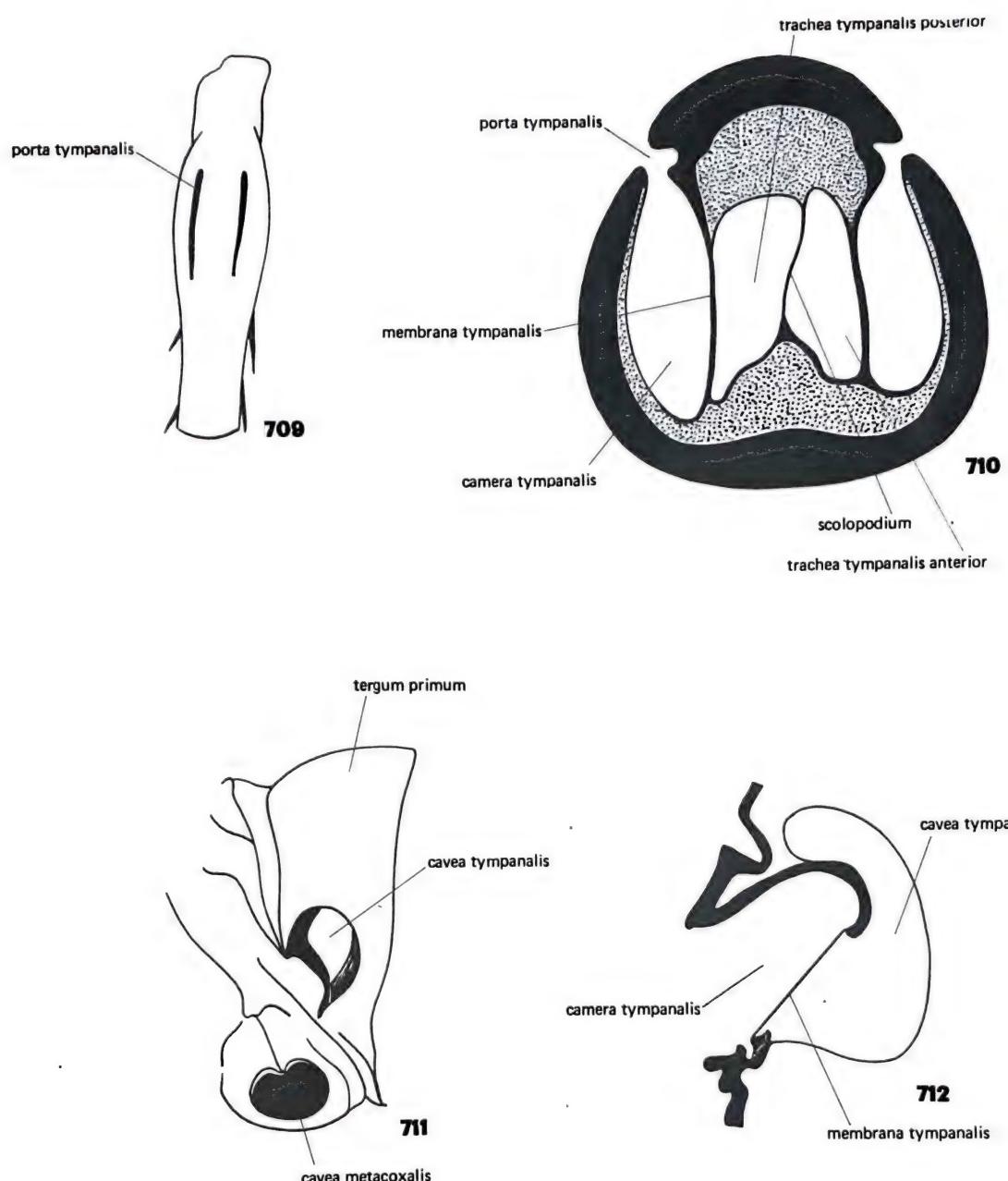


706

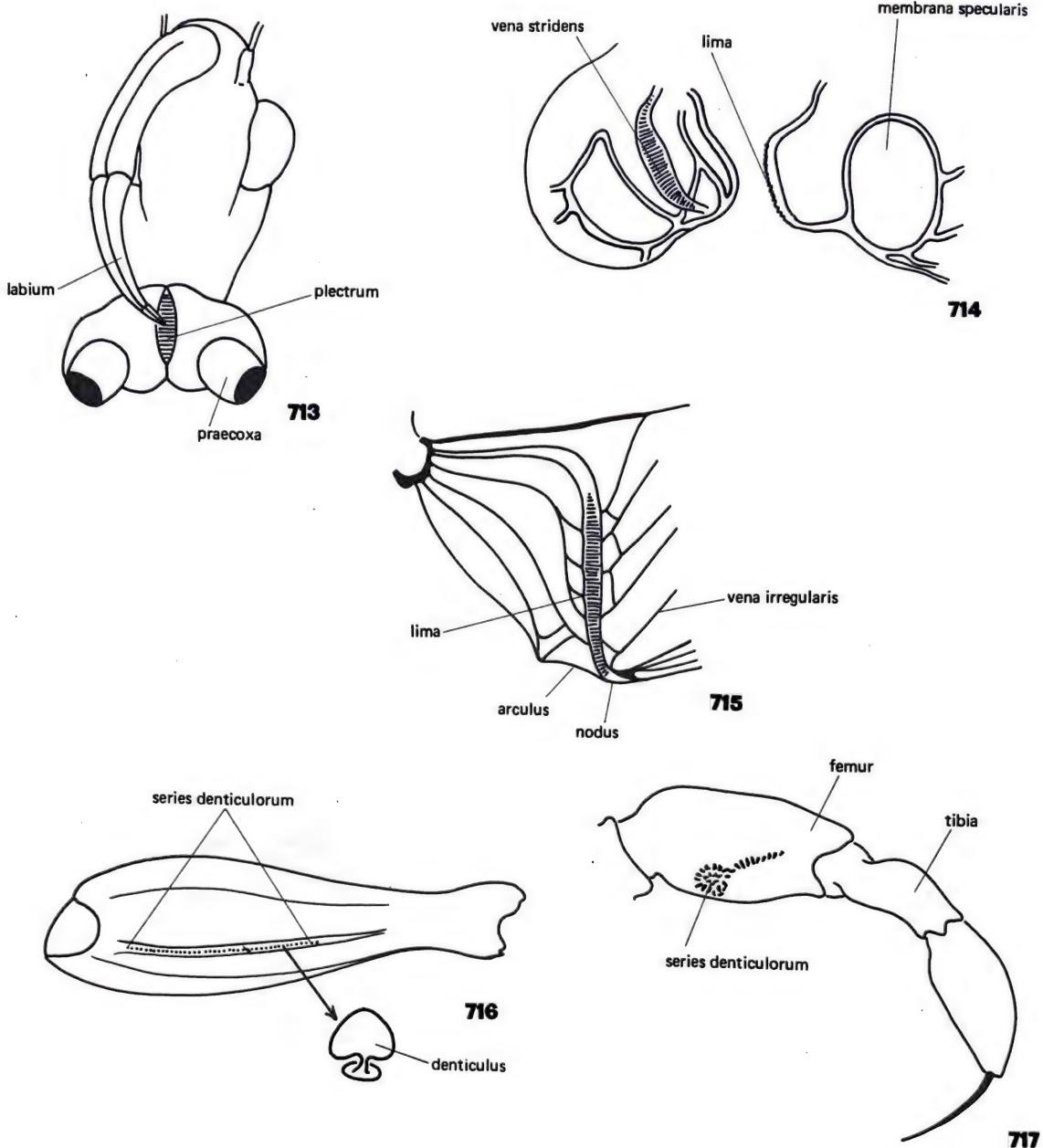


708

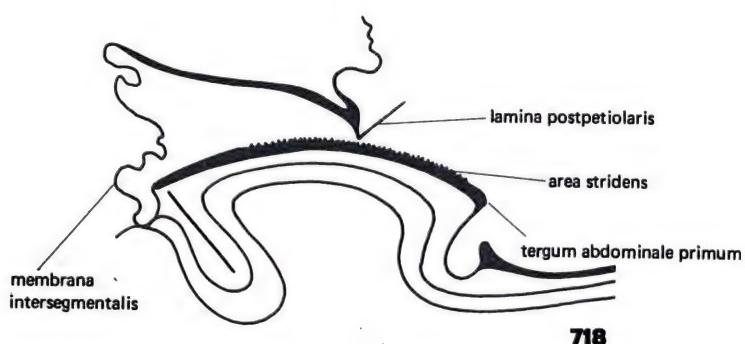
Figs. 703–708. The structure of the spiracle (spiraculum). — 703: The thoracic spiracle, 704–705: the position of the atrial valve, 704: open, and 705: closed, 706: the spiracle without atrium, 707–708: same with atrium, 707: external, and 708: internal (after Snodgrass)



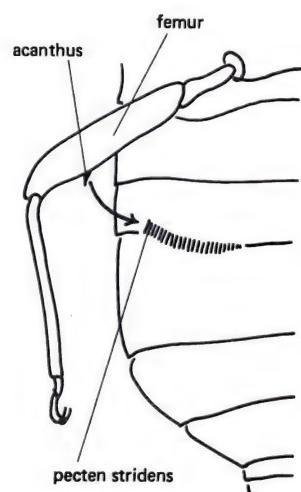
Figs. 709–712. The tympanal organ. — 709–710: The scolopophore (scolopophora) in the tibia, 709: in frontal view, and 710: in cross-section, 711–712: the auditory organ (tympanum), 711: in lateral view, and 712: in cross-section (after Shvanvich 709, 711, 712, and Weber 710)



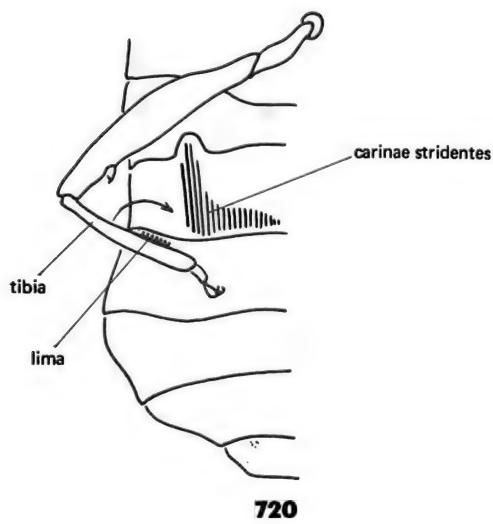
Figs. 713–717. The sound-producing organs. — 713: Head and prothorax of *Coranus* (Heteropt.) in ventral view, 714: the two wings of *Ephippigera* (Orthopt.) with stridulatory vein and file, 715: the fore wing of *Gryllus* (Orthopt.) showing stridulatory file, 716: femur of *Chorthippus* (Orthopt.) showing its inner side, and 717: the leg of *Sigara* (Heteropt.) (after Handlirsch 713, Günther 714, Pungur 715, Imms 716, and Jordan 717)



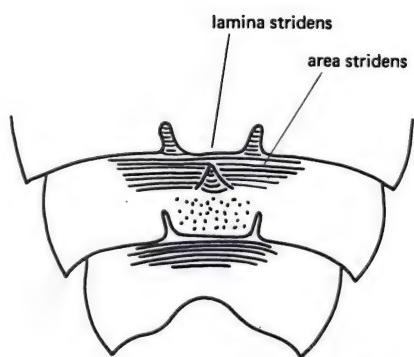
718



719

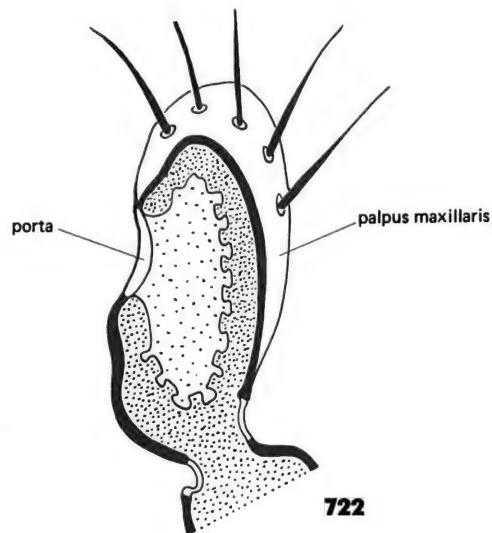


720

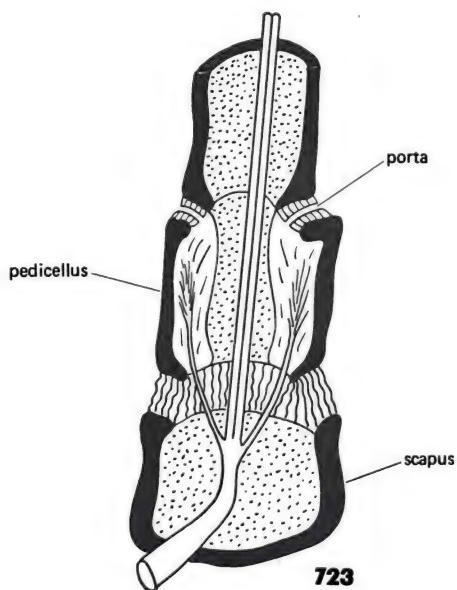


721

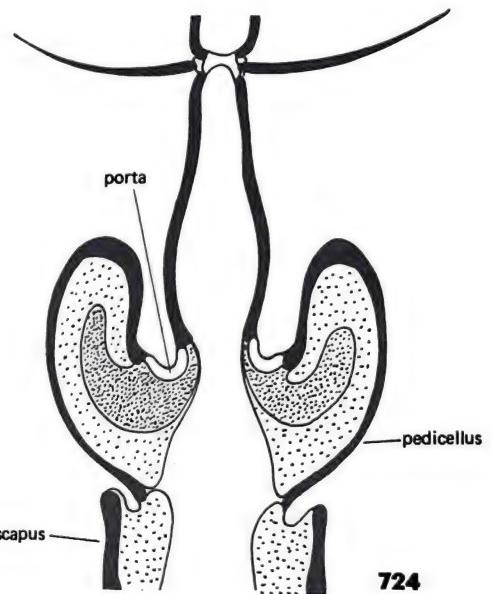
Figs. 718–721. The sound-producing organs. — 718: Stridulatory organ of *Myrmica* (Hymenopt.) in longitudinal section, 719–720: same of *Strigocoris* (Heteropt.), and *Artabanus* (Heteropt.) in ventral view, and 721: of *Naucoris* (Heteropt.) in dorsal view (after Janet 718, Usinger 719, 720, and Handlirsch 721)



722

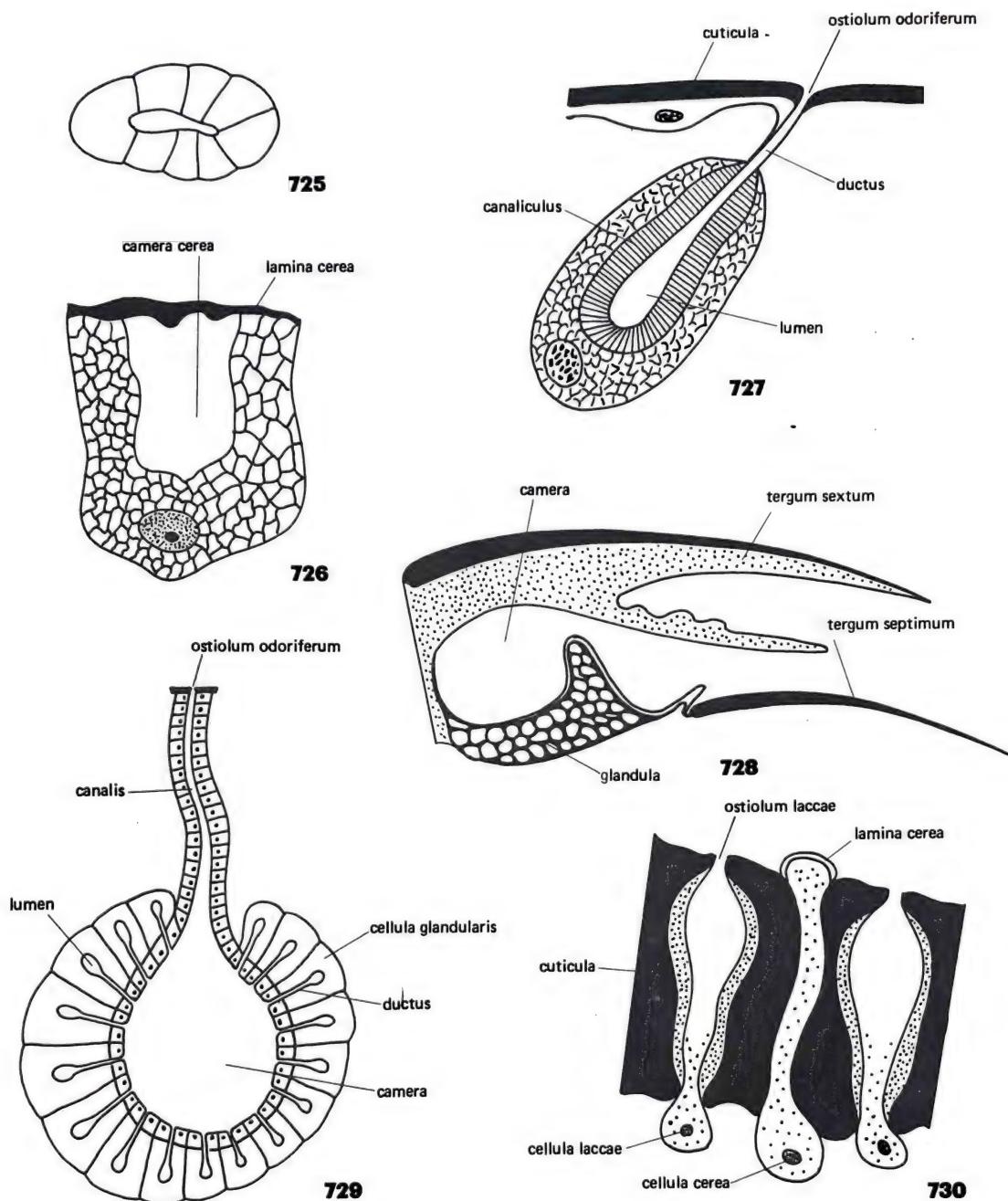


723

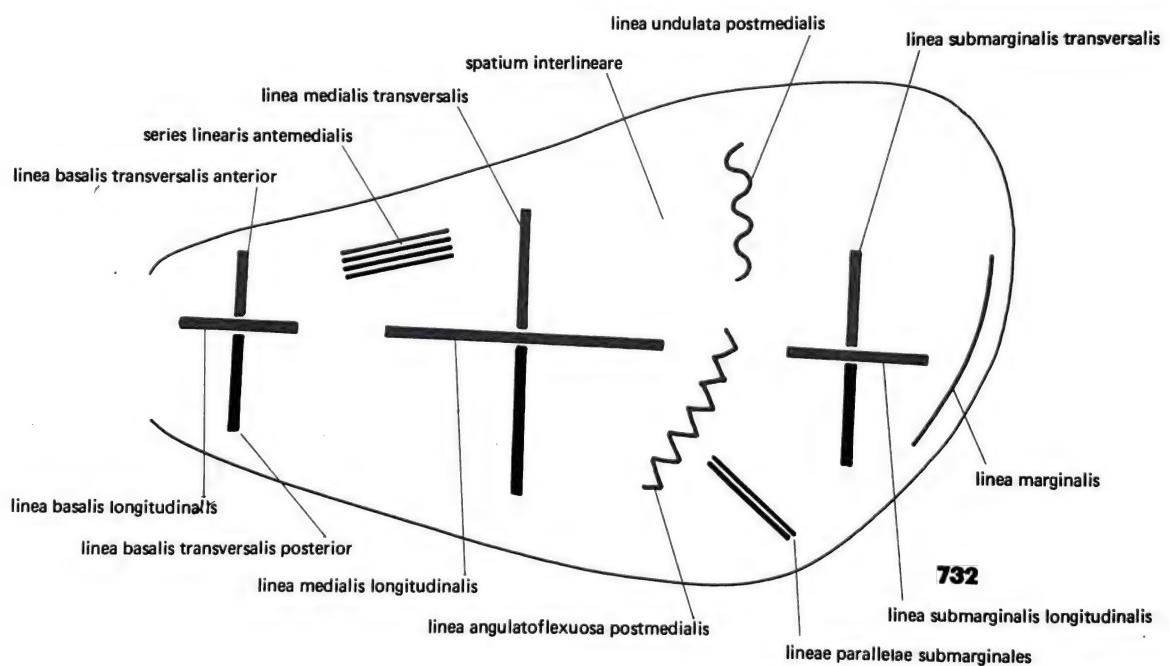
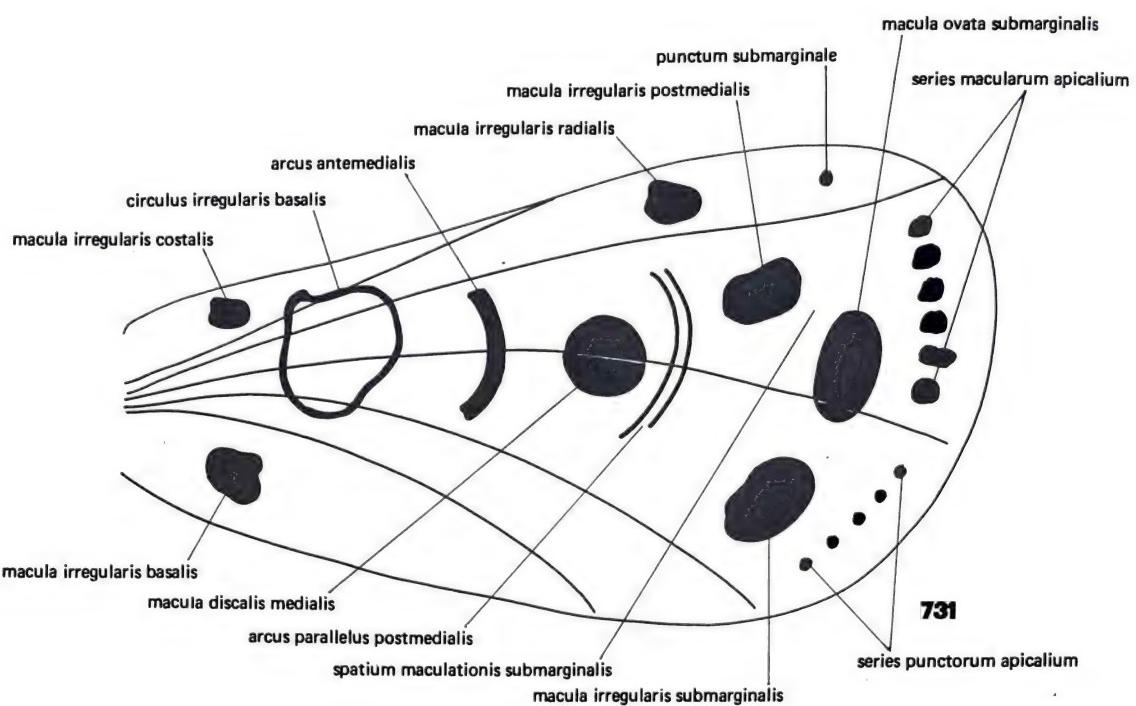


724

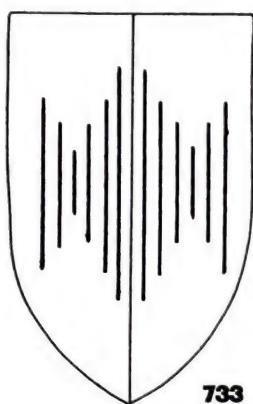
Figs. 722–724. The organ of Johnston in longitudinal section. — 722: In the maxillary palp, 723–724: in the antenna, 723: simple form, and 724: compound form (after Wenk 722, Debauche 723, and Séguy 724)



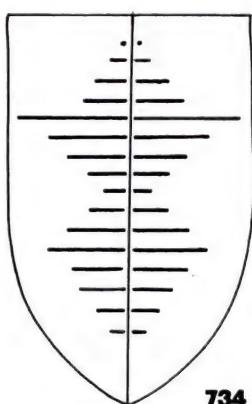
Figs. 725–730. The glands of secretion. — 725–726: Surface view of wax plate, and wax gland in Eriosome (Homopt.), 727: one cell scent gland in Chrysopa (Neuropt.), 728: scent gland of a worker Apis (Hymenopt.), 729: repugnatorial gland of Feronia (Coleopt.), and 730: lac and wax glands of Lecanium (Homopt.) in longitudinal section (after Baker 725, 726, Shvanvich 727, 728, Diercky 729, and Weber 730)



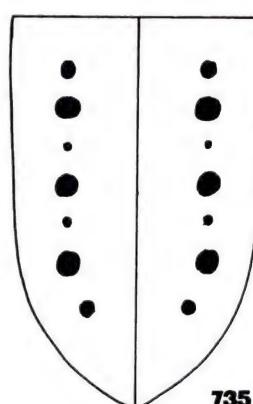
Figs. 731—732. Some examples for illustrating the maculation and position of lines on the wings



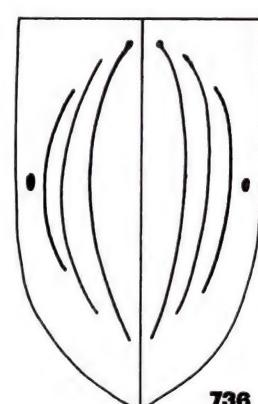
733



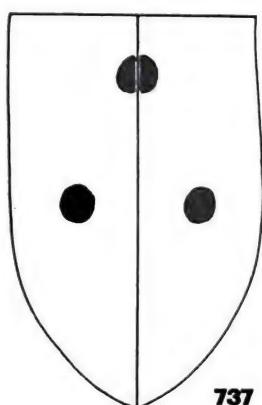
734



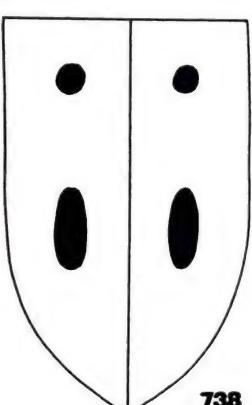
735



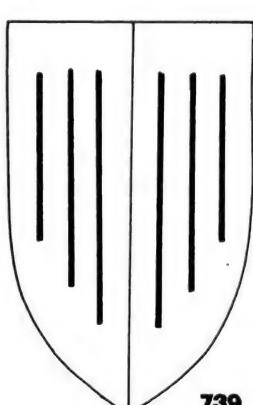
736



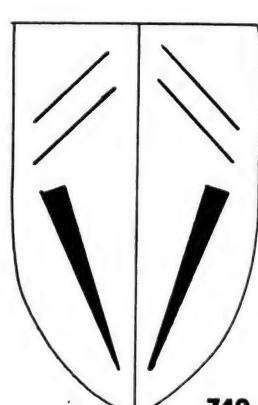
737



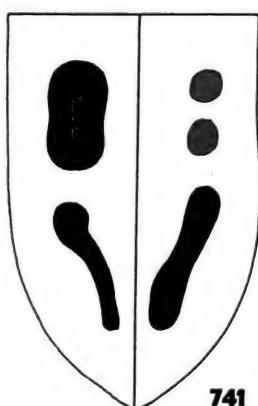
738



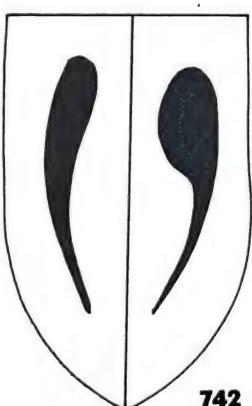
739



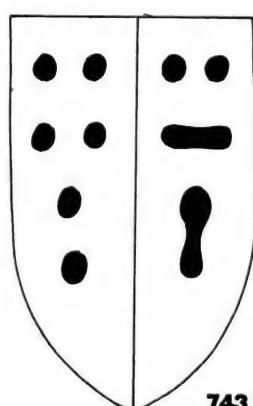
740



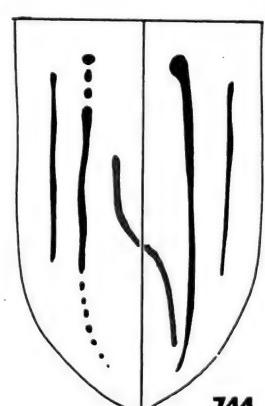
741



742

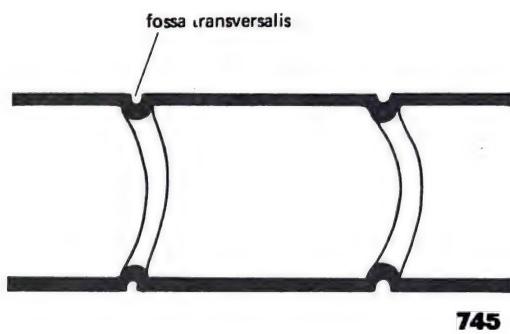


743

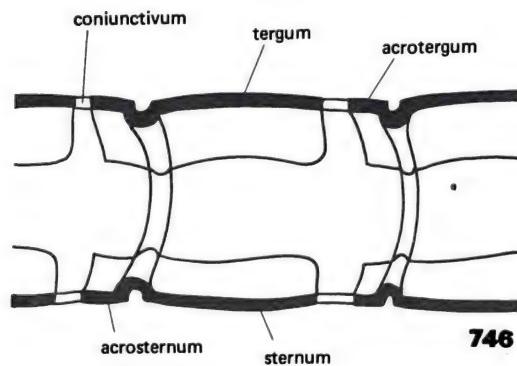


744

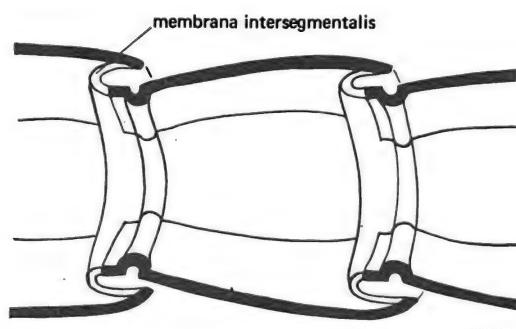
Figs. 733–744. Some examples of the wing pattern. — 733–740: Symmetrical, 733–736: rhythmical, and 737–740: arhythmical, 741–744: asymmetrical



745

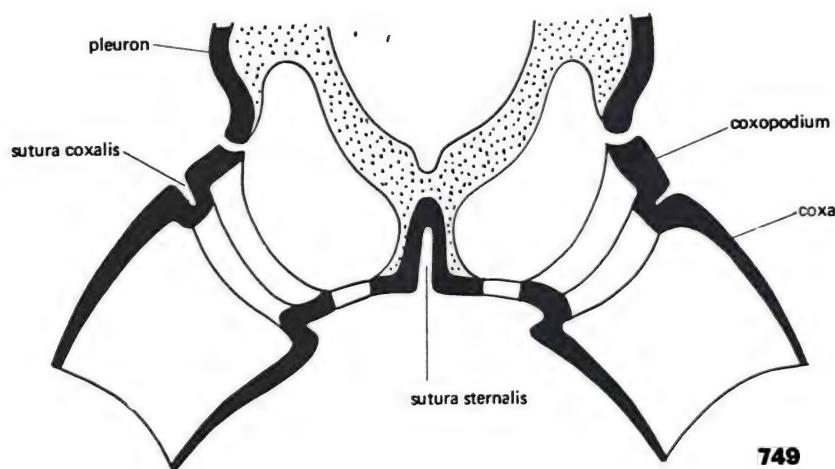
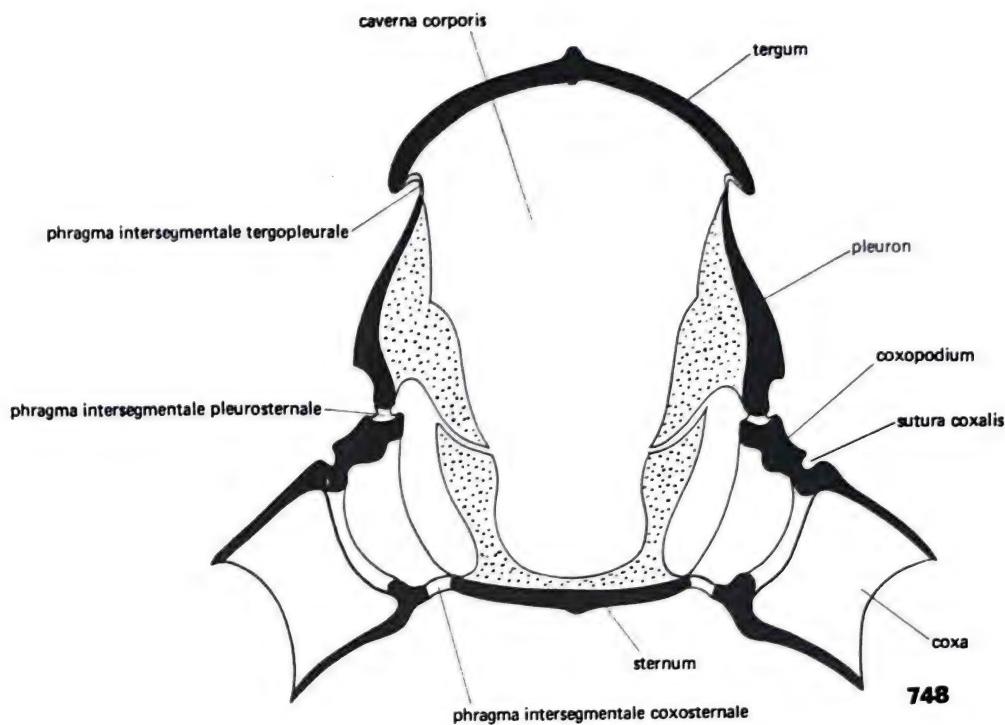


746

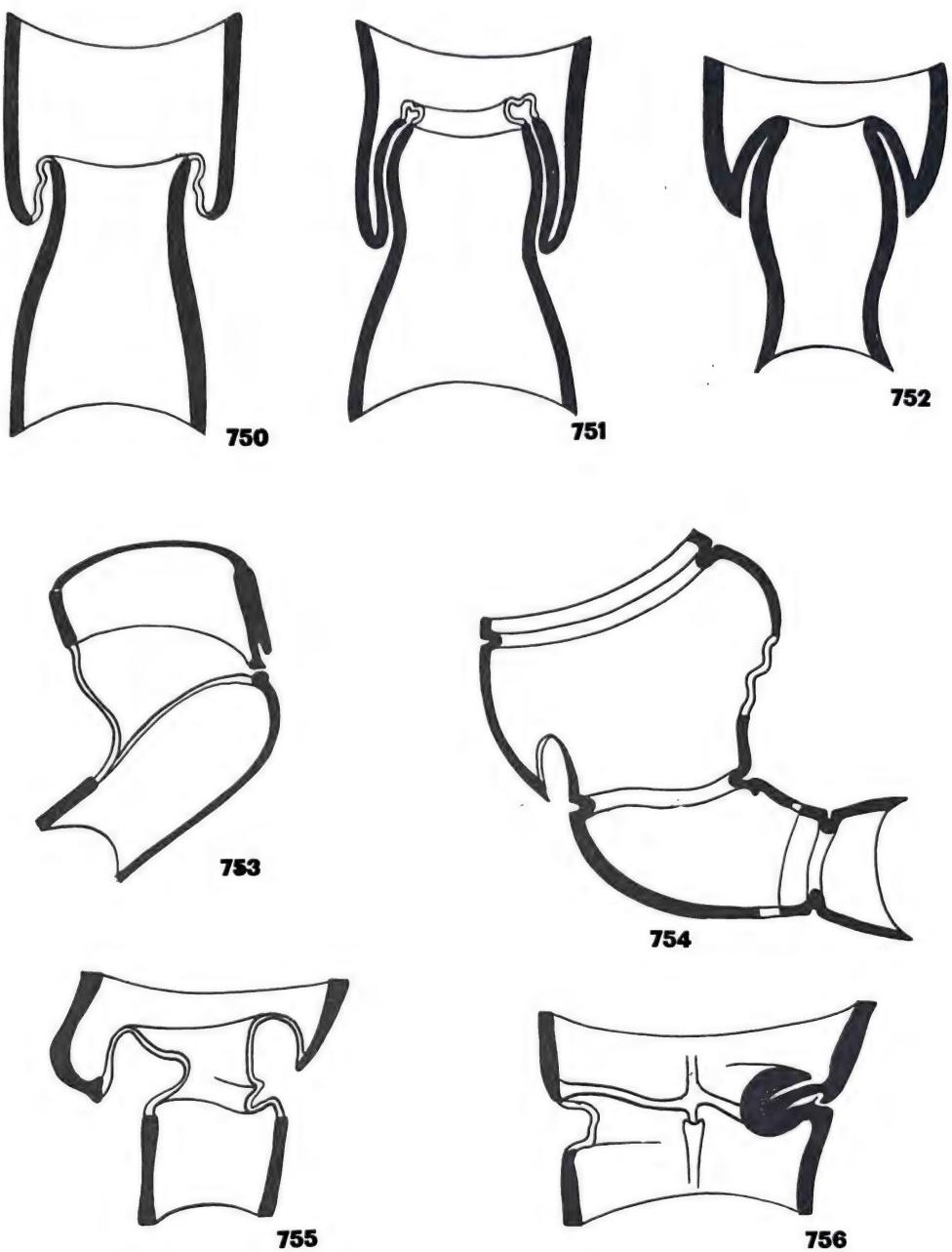


747

Figs. 745–747. Types of body segmentation (segmentatio). — 745: Primary, 746–747: secondary, 746: simple, and 747: telescopic (after Snodgrass)



Figs. 748—749. Thoracic segmentation in cross-section. — 748: Sternum without suture, and 749: same with suture (after Snodgrass)



Figs. 750—756. Various types of articulation (*articulatio*). 750—752: The symmetrical type, 750: simple with membrane, 751: ball-and-socket, 752: fixed, 753—756: the asymmetrical type, 753: elbow-joint, 754: hip-joint, 755: antennal, and 756: dicondylic (after Wever 750—752, and Snodgrass 753—756)

# INDEXES



# LATIN—ENGLISH

The italicized numbers refer to names in the figure captions, while those in bold face to particular body parts illustrated in detail.

- abdomen — abdomen 1, 2, **372**  
acanthus — acanthus 719  
acanthus frontalis — frontal acanthus 16  
— occipitalis — occipital acanthus 17  
*acetabulum* → *cavea coxalis*  
acrosternum — acrosternite 746  
acrotergum — acrotergite 200, 202, 204, **746**  
— mesothoracale — mesothoracic acrotergite 222  
— metathoracale — metathoracic acrotergite 196  
aculeus — aculeus 534  
acumen — acumen 483, 581  
*aedaeagus* → *aedeagus*  
*aedeagus* — aedeagus 391, 393–398, 395–398, 509–513, 529, 529, 530, 557, 565, 566, 566, 574, 575, 579, 580, 581, 582, 586, 590, 592, 598, 603, 605, 614, 621, 622, 623  
*aedagus* → *aedeagus*  
*aedoeagus* → *aedeagus*  
ala — wing 209, **302**  
— anterior — fore wing 2, 194, 242, 310  
— posterior — hind wing 2, 194, 242, 310  
alula — alula 369  
alveolus — alveole 655, 656, 659  
ampulla — ampulla 596  
anapleuron — anapleurite 235  
anellus — anellus 595, 597, 598  
anepimeron mesothoracale — anepimeral sclerite of mesothorax 233, 240  
— metathoracale — anepimeral sclerite of metathorax 240  
— prothoracale — anepimeral sclerite of prothorax 240  
anepisternum — anepisternal sclerite 237, 238  
— mesothoracale — anepisternal sclerite of mesothorax 233  
— metathoracale — anepisternal sclerite of metathorax 233  
— prothoracale — anepisternal sclerite of prothorax 213–215, 233  
annulus marginalis — marginal ring 570  
anoprocessus — anoprocess 552  
anteclypeus — anteclypeus 162, 166

- antenna — antenna 1, 76, 103, 125, 128, 141  
— abbreviata — abbreviate antenna 81  
— attenuata — attenuate antenna 87  
— clavata — clavate antenna 83  
— fusiformis — fusiform antenna 94  
— imbricata — imbricate antenna 92  
— inaequaliter pinnata — alternately pinnate antenna 90  
— incrassata — incrassate antenna 82  
— lamellata — lamellate antenna 89  
— laminata — laminate antenna 85  
— mucronata — mucronate antenna 86  
— pectinata — pectinate antenna 93  
— plumata — plumose antenna 91  
— setigera — setigerous antenna 88  
— spathulata — spathulate antenna 84  
antennifer — antennifer 15  
antrum — antrum 599  
anus — anus 390, 392, 399, 410, 412, 413, 425, 452, 503, 505, 508, 514, 515, 554, 565, 568, 583, 593, 595, 599, 613, 621  
apex appendicularis — apex of appendage 485  
— furcatus — bifurcate apex of appendage 482  
— cercalis — cercal apex 433, 494  
— galealis — apex of galea 61  
— lacinialis — apex of lacinia 61  
— lobi coxalis anterioris — apex of anterior lobe of coxa 263  
— — — posterioris — apex of posterior lobe of coxa 263  
— — femoralis basalis inferioris — apex of lower basal lobe of femur 266  
— — — superioris — apex of upper basal lobe of femur 266  
— — genitalis — apex of genital lobe 485, 544, 545  
— — molaris inferior — lower apex of molar lobe 53  
— — — superior — upper apex of molar lobe 53  
— — subgenitalis — apex of subgenital lobe 570  
— — subtrochanteralis anterioris — apex of anterior lobe of subtrochanter 265  
— — supraanalisis — apex of supra-anal lobe 440  
— — trochanteralis anterioris — apex of anterior lobe of trochanter 264  
— — — posterioris — apex of posterior lobe of trochanter 264  
— mandibularis — apex of mandible 52  
— ovipositoris — apex of ovipositor 400  
— — inferior — lower apex of ovipositor 403  
— — superior — upper apex of ovipositor 403  
— palpi labialis — apex of labial palp 68, 69  
— — maxillaris — apex of maxillary palp 61, 62  
— pronotalis anterior — anterior apex of pronotum 216  
— — lateralis — lateral apex of pronotum 216  
— — posterior — posterior apex of pronotum 216

- apex pygidialis — pygidial apex 490  
apodema — apodeme 455, 538, 539, 585, 623  
— basalis — basal apodeme 408, 409  
apophysis — apophysis 517, 600  
appendiculae (*pl.*) — claspettes 591  
*appendicula* → appendicula analis  
— analis — anal appendage 430  
— dorsalis — dorsal appendage 431  
— genitalis — genital appendage 390  
— ventralis — ventral appendage 431  
arculus — arculus 715  
arcus antemedialis — antemedial arc 731  
— parallelus postmedialis — postmedial parallel arc 731  
area analis — anal area 321  
— apicalis — apical area 311  
— axillaris — axillary region 299  
— costalis — costal area 311, 314  
— cubitalis — cubital area 311, 317  
— discoidalis — discoidal area 318  
— medialis — median area 311, 316  
— mediocubitalis — mediocubital area 319  
— medioradialis — medioradial area 320  
— postcubitalis — postcubital area 311  
— postocularis — postocular area 15  
— radialis — radial area 311, 313, 315  
— stridens — stridulatory area 718, 721  
— subcostalis — subcostal area 311, 312  
— subocularis — subocular area 15  
arista — arista 88, 666  
arolium — arolium 268, 270–274  
articulatio — articulation 750–756  
— alaris anterior — articulation of fore wing 206  
— — posterior — articulation of hind wing 206  
— antennalis — antennal articulation 77  
— — dorsalis — dorsal articulation of antenna 78  
— — ventralis — ventral articulation of antenna 78  
— coxalis — coxal articulation 257–261  
— — anterior — anterior articulation of coxa 262  
— — posterior — posterior articulation of coxa 262  
— femoralis'basalis — basal articulation of femur 266  
— mandibularis anterior — anterior articulation of mandible 53  
— — exterior — outer articulation of mandible 52  
— — interior — inner articulation of mandible 52  
— — posterior — posterior articulation of mandible 53  
— mesocoxalis — mescoxal articulation 209

- articulatio palpi labialis — articulation of labial palp 69, 95
- maxillaris — articulation of maxillary palp 62
- pleurostomatalis anterior — anterior articulation of pleurostoma 15, 51
- posterior — posterior articulation of pleurostoma 15, 51
- postoccipitalis — postoccipital articulation 15, 28
- articulus antennalis — antennal joint 77
- palpi maxillaris — subjoint of maxillary palp 123
- labialis apicalis — apical joint of labial palp 67, 69
- — basalis — basal joint of labial palp 67, 69
- artus palpi labialis externomedialis — externomedial joint of labial palp 67
- — internomedialis — internomedial joint of labial palp 67
- — medialis — middle joint of labial palp 67, 69
- — maxillaris apicalis — apical joint of maxillary palp 61, 62, 123
- — basalis — basal joint of maxillary palp 61, 62, 95
- — — externomedialis — externomedial joint of maxillary palp 61, 62
- — — internomedialis — internomedial joint of maxillary palp 61, 62
- — — medialis — middle joint of maxillary palp 61, 62
- atrium — atrium 704, 705, 706, 707, 707, 708, 708
- auricula — auricle 296
- auxilia — auxilia 268, 270
  
- basicercus — basicercus 499
- basicoxa — basicoxite 261–263
- basiepiphallus — basiepiphallus 455
- basiprobscis* → rostrum
- basipulvillus* → auxilia
- basisternum — basisternum 205–207, 238, 239, 260
  - mesothoracale — mesothoracic basisternum 222–224, 226, 233, 240
  - metathoracale — metathoracic basisternum 228, 229, 231, 233
  - prothoracale — prothoracic basisternum 210–215, 233, 234, 240
- basistylus — basistylus 408, 588, 590–592
- basivalvula — basivalvula 465, 466, 468
- basivirga — base of virga 482
- buccula apicalis — apical buccula 163
  - basalis — basal buccula 163
- bulbus ejaculatorius — ejaculatory bulb 459
- bulla seminalis — bulla seminalis 599
  - *spermatica* → bulla seminalis
- bursa copulatrix — copulatory sac 515, 587
  
- calcar — spur 253, 268
  - exterius — outer spur 267
  - femorale — femoral spur 291
  - interius — inner spur 267
- callus axillaris* → tegula

- callus cerci — cercal callus 552  
— clypealis — clypeal callus 40  
— frontalis — frontal callus 38  
— *humeralis* → tegula  
*calyptra* → alula  
*calytron* → alula  
camera — chamber 728, 729  
— cerea — wax chamber 726  
— tympanalis — tympanal air-chamber 710, 712  
canaliculus — canalicule 727  
— interlabialis — interlabial channel 154  
— pseudotrachealis — pseudotracheal collecting channel 131  
canalis — canal 697, 698, 729  
— alimentaris — alimentary canal 114, 117, 136–140, 144–147, 149–152, 154, 174–179, 183, 188, 191, 192  
— genitalis — genital canal 618–620, 622, 627  
— maxillaris — maxillary canal 182  
— salivarius — salivary canal 98, 136–140, 144, 146, 147, 149–152, 174–179, 183, 191, 192  
— venenatus — poison canal 537  
capitulum — club 76  
capsula — capsula 584  
caput — head 1, 2, 3  
cardo — cardo 61, 63–66, 99, 101, 107, 118–122, 126, 184  
carina — carina 586, 688  
— clypealis — clypeal carina 40  
— femoralis dorsalis — dorsal femoral carina 255, 266  
— — ventralis — ventral femoral carina 255, 266  
— frontalis — frontal carina 38  
— frontoclypealis — frontoclypeal carina 44  
— mentalis — mental carina 67  
— penis — carina penis 595  
— submental — submental carina 67  
— transversalis — transversal carina 220  
carinae stridentes (*pl.*) — stridulatory carinae 720  
catoprocessus — catoprocess 552  
cauda — tail 409  
caudoepiphallus — caudoepiphallus 455  
caulis — caulis 595  
*cavea alimentaris* → canalis alimentaris  
— antennalis — antennal socket 3, 15, 50, 77  
— cardinalis — cardinal cavity 61  
— coxalis — coxal cavity 202, 204, 206, 259  
— — apicalis — apical coxal cavity 262, 263  
— — basalis — basal coxal cavity 262, 263

- cavea epistomatalis — mouth cavity 98  
— galealis — galeal cavity 117  
— genitalis — genital cavity 468  
— mandibularis — mandibular cavity 53  
— maxillaris — maxillary cavity 61  
— mesocoxalis — mescoxal cavity 193, 194, 201, 208  
— metacoxalis — metacoxal cavity 193, 194, 234, 711  
— oocularis — ocular cavity 3  
— oralis — oral cavity 132  
— praecoxalis — precoxal cavity 193, 194, 201, 233, 234, 238  
— *praeoralis* → cavea oralis  
— *salivaria* → canalis salivarius  
— spiracularis — spiracular atrium 704  
— stipitalis — stipital cavity 61  
— tympanalis — tympanal cavity 711, 712  
caverna — cavern 701  
— basicoxalis — basicoxal cavity 262  
— corporis — body cavity 748  
— clypealis — clypeal cavity 41  
— frontalis — frontal cavity 39  
— sensillaris — sensory pit 702  
cellula analis apicalis — apical anal cell 321  
— — basalis — basal anal cell 321  
— — medialis — medial anal cell 321  
— apicalis — apical cell 316  
— axillaris — axillary cell 299  
— *antecubitalis* → cellula costalis  
— cerea — wax cell 730  
— costalis — costal cell 312, 319  
— cubitalis — cubital cell 316, 319, 320  
— discoidalis — discoidal cell 318  
— glandularis — glandular cell 729  
— iugalis antebasalis — anterobasal jugal cell 325  
— — apicalis — apical jugal cell 325  
— — medialis — medial jugal cell 325  
— — posterobasalis — posterobasal jugal cell 325  
— laccae — lac cell 730  
— medialis — median cell, 316  
— pterostigmatalis — pterostigmatic cell 316  
— radialis — radial cell 315, 316  
— — apicalis — apical radial cell 312  
— — basalis — basal radial cell 312  
— — medialis — medial radial cell 312  
— sensillaris — sense cell 655, 659  
— subcostalis — subcostal cell 312, 319

*cephalon* → *caput*

*cercina* → *stylus*

*cercus* — *cercus* 1, 372, 389, 391, 400, 403, 410—412, 417—419, 424—427, 430, 433, 435—439, 442, 450, 451, 453, 454, 456, 458, 459, 462, 465, 467, 473, 474, 479, 480, 488, 497, 499, 501, 502, 504, 506, 507, 521, 543, 549, 551, 559, 560, 567, 568, 570, 588, 589, 594, 607—609, 611, 621

*cercus* (Odonata) → *appendicula analis*

*cervix bursae* — *bursal neck* 599

*cibarium* — *cibarium* 124, 142, 143

*cilia* (*pl.*) — *fringe of hairs* 352

— *tarsalia* (*pl.*) *tarsal hairs* 269

— *tibialia* (*pl.*) — *tibial hairs* 267

*cilium* — *thin hair* 651, 693

— *occipitale* — *occipital hair* 666

*cingulum* — *cingulum* 459, 586

*circulus orbicularis* — *orbicular circle* 299, 311

— *irregularis basalis* — *basal irregular circle* 731

*clava* (antennalis) → *capitulum*

*clavus* (alaris) — *clavus* (wing) 306—308

— *(genitalis)* — *clavus* (genital) 596

— *appendicularis exterior* — *outer margin of appendage* 487

— — *interior* — *inner margin of appendage* 482

— *basicoxalis basalis anterior* — *fore basal margin of basicoxa* 262, 263

— — — *posterior* — *hind basal margin of basicoxa* 262, 263

— *cardinalis apicalis* — *apical margin of cardo* 61

— — *basalis* — *basal margin of cardo* 61

— — *externomedialis* — *externomedial margin of cardo* 61

— — *internomedialis* — *internomedial margin of cardo* 61

— *cavi antennalis* — *margin of antennal socket* 3

— — *coxalis anterior* — *fore margin of coxal cavity* 204, 206

— — — *posterior* — *hind margin of coxal cavity* 204, 206

— — *cercalis exterior* — *outer margin of cercus* 433, 494

— — *interior* — *inner margin of cercus* 433, 494

— *coxalis apicalis inferior* — *lower apical margin of coxa* 262

— — — *superior* — *upper apical margin of coxa* 262

— *clypealis anterior* — *fore margin of clypeus* 41

— — *basalis* — *basal margin of clypeus* 40

— *clypeolabralis apicalis* — *apical margin of clypeolabrum* 47

— — *basalis* — *basal margin of clypeolabrum* 46

— *denticulatus cercalis* — *dentate margin of cercus* 495

— *femoralis dorsolateralis* — *dorsolateral margin of femur* 266

— — *ventrolateralis* — *ventrolateral margin of femur* 266

— *frontalis anterior* — *fore margin of frons* 39

— *frontoclypealis anterior* — *fore margin of frontoclypeus* 45

— *galealis exterior* — *outer margin of galea* 61

- clavus galealis interior — inner margin of galea 61
- gularis cervicalis — cervical margin of gula 28, 49
- — epistomatalis — epistomal margin of gula 28, 49
- — lateralis — lateral margin of gula 49
- labralis basalis — basal margin of labrum 43
- lacinialis exterior — outer margin of lacinia 61
- — interior — inner margin of lacinia 61
- mandibularis exterior — outer margin of mandible 53
- — interior — inner margin of mandible 52
- mentalis basalis — basal margin of mentum 68
- mesopleuralis anterior — fore margin of mesopleuron 193, 194, 222
- — dorsolateralis — dorsolateral margin of mesopleuron 193, 194
- — posterior — hind margin of mesopleuron 193, 194, 222
- — ventrolateralis — ventrolateral margin of mesopleuron 193, 194
- mesoscutalis anterior — anterior margin of mesoscutum 222
- — posterior — posterior margin of mesoscutum 222
- metasternalis anterior — anterior margin of metasternum 193, 194
- — dorsolateralis — dorsolateral margin of metasternum 193, 194
- — posterior — posterior margin of metasternum 193, 194
- notalis posterior — posterior margin of notum 204
- ocularis anterior — anterior ocular margin 3, 15
- — posterior — posterior ocular margin 3, 15, 28
- pedicellaris — margin of pedicel 77
- pleuralis anterior — anterior margin of pleuron 206
- — dorsolateralis — dorsolateral margin of pleuron 202
- — posterior — posterior margin of pleuron 206
- — ventrolateralis — ventrolateral margin of pleuron 202
- pleurostomatalis anterior — anterior margin of pleurostoma 51
- — dorsalis — dorsal margin of pleurostoma 51
- — posterior — posterior margin of pleurostoma 51
- — ventralis — ventral margin of pleurostoma 51
- postlabralis lateralis — lateral margin of postlabrum 43
- postoccipitalis orbitalis — orbital margin of postocciput 28
- posttrochanteralis dorsalis — dorsal margin of posttrochanter 265
- — lateralis — lateral margin of posttrochanter 265
- — ventralis — ventral margin of posttrochanter 265
- praelabralis lateralis — lateral margin of prelabrum 43
- pronotalis anterior — anterior margin of pronotum 193, 194, 210, 217
- — lateralis — lateral margin of pronotum 216, 217
- — posterior — posterior margin of pronotum 193, 194, 210, 217
- — ventrolateralis — ventrolateral margin of pronotum 193, 194
- pygidialis — pygidial margin 491
- scapalis apicalis — apical margin of scape 77
- scutalis posterior — posterior margin of scutum 206
- sternalis posterior (abdomen) — posterior margin of sternite 403

- clavus sternalis posterior (thorax) — posterior margin of sternum 203  
— stipitalis apicalis exterior — outer apical margin of stipes 61  
— — — interior — inner apical margin of stipes 61  
— — basalis — basal margin of stipes 61  
— — externomedialis — externomedial margin of stipes 61  
— — internomedialis — internomedial margin of stipes 61  
— subcoxalis basalis anterior — anterior basal margin of subcoxa 263  
— — — posterior — posterior basal margin of subcoxa 263  
— submentalis apicalis — apical margin of submentum 68  
— — basalis — basal margin of submentum 68  
— — externomedialis — externomedial margin of submentum 68  
— — internomedialis — internomedial margin of submentum 68  
— subtrochanteralis dorsalis — dorsal margin of subtrochanter 265  
— — ventralis — ventral margin of subtrochanter 265  
— sternalis anterior — anterior margin of sternum 203  
— — lateralis — lateral margin of sternum 203  
— — posterior — posterior margin of sternum 203, 403  
— sternopleuralis anterior — anterior margin of sternopleuron 203  
— — posterior — posterior margin of sternopleuron 203  
— tergalis posterior — posterior margin of tergite 202, 403  
— trochanteralis apicalis anterior — anterior margin of trochanteral apex 264  
— — — inferior — inferior margin of trochanteral apex 264  
— — — posterior — posterior margin of trochanteral apex 264  
— — — superior — superior margin of trochanteral apex 264  
— — dorsobasalis — dorsobasal margin of trochanter 264  
— — ventrobasalis — ventrobasal margin of trochanter 264  
— valvaris dorsalis — dorsal margin of valve 402, 403  
— valvaris ventralis — ventral margin of valve 402, 403  
— verticalis epistomatalis exterior — outer epistomal margin of vertex 3, 15  
— — — interior — inner epistomal margin of vertex 3, 15  
**clypeolabrum** — clypeolabrum 47, 95, 189  
**clypeus** — clypeus 3, 15, 41, 98, 100, 129, 155, 180, 187  
— *posterior* → postclypeus  
**colon** (Lepidoptera) → tuba analis  
**collum** (thorax) — collar 195  
— (genitale) — collum 585  
**condylus** — condyle 256  
**coniunctivum** — conjunctiva 615, 746  
**connectivum** — connective 661  
**connexivum** — connexivum 377  
**corbicula** — corbicle 296  
**corema** (Lepidoptera) → scopa  
**corium** — corium 306–308  
**cornutus** — cornutus 595  
**corona** — corona 596, 692

- corona femoralis dorsolateralis exterior — outer dorsolateral crest of femur 255, 266  
 — — — interior — inner dorsolateral crest of femur 255  
 — — — ventrolateralis exterior — outer ventrolateral crest of femur 255, 266  
 — — — internoinferior — lower inner ventrolateral crest of femur 255  
 — — — internosuperior — upper inner ventrolateral crest of femur 255  
 — molaris — molar crown 53  
 — pronotalis mediolongitudinalis — mediolongitudinal crown of pronotum 219  
 — — lateralis orbicularis — latero-orbicular crown of pronotum 218  
 — spiracularis — spiracular corona 705  
 corpus bursae — copulatory sac 599  
 — centrale — central body 522  
 — genitale — copulatory organ 474, 479  
 costa (alaris) — costal vein 298, 299, 302, 303, 309–312, 314  
 — (genitalis) — costa (genital) 595, 598  
 — iugalis — jugal margin 325  
 — remigialis — remigial margin 311  
 — vannalis — vannal margin 321  
 coxa — coxa 197, 199, 203, 253, 254, 260, 261, **262**, 298, 748, 749  
 — fixa — fixed coxa 262  
 — libera — free coxa 263  
*coxomarginale* → basicoxa  
 coxopodium — coxopodite 404–406, 420–423, 425, 451, 748, 749  
*coxosternum* → pleurosternum  
 crista pronotalis longitudinalis — longitudinal crest of pronotum 216, 221  
 ctenidium labiale — labial comb 70  
 — maxillare — maxillary comb 65  
 — thoracale — thoracic comb 197  
 cubitus — cubital vein 298, 299, 301–303, 309–311, 320  
 — *anticus* → cubitus  
 — *posticus* → postcubitus  
 — primus — first cubital vein 302  
 — secundus — second cubital vein 302  
 cucullus — cucullus 597, 598  
*culus* → anus  
 cuneus — cuneus 16, 307, 308  
 cuspis — cuspis 528  
 — (Dermaptera) → acumen  
 cuticula — cuticle 628, 655, 659, 678, 727, 730
- dens — dens 413, 416  
 denticulus — denticle 686, 716  
 — abdominalis — abdominal denticle 444  
 — cercalis — cercal denticle 494, 499  
 — mandibularis — mandibular denticle 52  
 — molaris — molar denticle 53

- denticulus lobi genitalis — denticle of genital lobe 485  
— praestomatalis — prestomal tooth 132, 154  
— pygidialis — pygidial denticle 493  
— subgenitalis — subgenital denticle 445  
— supraanalis — supra-anal denticle 441  
— tergalis decimus — denticle of tenth tergite 444  
— tibialis — tibial toothlet 267  
digitulus — egg guide 465  
digitus — digitus 596  
— volSELLARIS — volSELLAR digitus 526, 528, 529  
*distiproBoscis* → labellum  
dististylus — dististylus 588, 590–592  
dorsocoxa — dorsocoxa 262, 263  
*dorsum* → mesonotum et metanotum  
ductus — duct 727, 729  
— bursae — bursal duct 600  
— eiaculatorius — ejaculatory duct 389, 392, 393, 441, 459, 460, 508, 615  
— seminalis — seminal duct 599
- ectoproctum — ectoprot 544, 546, 548–550, 553–556, 561, 562  
editum — editum 596  
embolium — embolium 307  
empodium — empodium 276, 278  
elytron — elytron 235  
— brevissimum — short elytron 250  
— integratum — full elytron 252  
— truncatum — truncate elytron 251  
endocuticula — endocuticle 628  
endomeron — endomere 541  
— laterale — lateral endomere 538, 539  
— mediale — medial endomere 538, 539  
endophallus — endophallus 391, 393, 396, 397, 586, 616  
endosoma — endosome 616  
endotendon dorsale — dorsal endotendon 584–586  
— ventrale — ventral endotendon 584–586  
endotheca — endotheca 393, 396, 398  
entoprocessus — entoprocess 557  
epandrium — epandrium 568, 588, 590  
*epiandrium* → epandrium  
epicnemium — prepectus 198  
epiderma — epidermis 628, 655  
*epidermis* → epiderma  
epifrons — epifrons 3, 15  
epimeron — epimeron 204, 206, 260, 261, 298, 484  
epiphallus — epiphallus 463, 565, 574–576

- epipharynx — epipharynx 136, 182, 183  
epiphysis — epiphysis 132, 148  
epiproctum — epiproct 372, 389–392, 400, 403, 413, 425, 436, 438, 451, 453, 454, 458, 459, 465, 467, 502, 517, 519–521, 577  
episternum — episternite 197, 200, 204, 206, 260, 261, 298  
epitendon — epitendon 585  
euplantula — euplantula 268  
eupleuron mesothoracale — dorsal supracoxal sclerite of mesothorax 195  
— metathoracale — dorsal supracoxal sclerite of metathorax 195  
— prothoracale — dorsal supracoxal sclerite of prothorax 195  
eusternum — eusternum 195  
eutrochantin prothoracale — prothoracic eutrochantin 233  
exocorium — exocorium 308  
exocuticula — exocuticle 628
- fasciculus — fasciculus 678  
fastigium — fastigium 685  
— genitale — genital fastigium 476  
— ocelli medialis — fastigium of medial ocellus 15  
— subgenitale — subgenital fastigium 443, 447, 464, 476  
femur — femur 253, 254, 255–266, 256, 266, 290, 294–296, 717, 719  
fibula vaginalis — vaginal fibula 587  
filum caudale — caudal filament 424–426  
— terminale — terminal filament 417–419  
fissura medialis — medial incision 483  
fistula — fistula 585  
flagellum — flagellum 76  
— (genitale) — flagellum (genital) 432, 509, 510  
foramen basale — basal foramen 615  
— genitale — genital foramen 526–528  
— occipitale — occipital foramen 28, 29, 48, 49  
— thoracale — thoracic foramen 214, 215  
fossa antennalis — antennal furrow 77, 78  
— basicoxalis — basicoxal furrow 262  
— clypealis longitudinalis — longitudinal furrow of clypeus 40  
— — transversalis — transversal furrow of clypeus 40  
— clypeolabralis longitudinalis apicalis — apical longitudinal furrow of clypeolabrum 46  
— — — basalis — basal longitudinal furrow of clypeolabrum 46  
— — — transversalis — transversal furrow of clypeolabrum 46  
— coxalis — coxal furrow 262  
— femoralis — femoral furrow 255, 266  
— frontalis longitudinalis — longitudinal furrow of frons 38  
— — transversalis — transversal furrow of frons 38  
— frontoclypealis longitudinalis apicalis — apical longitudinal furrow of frontoclypeus 44  
— — — basalis — basal longitudinal furrow of frontoclypeus 44

- fossa frontoclypealis transversalis — transversal furrow of frontoclypeus 44  
— genalis — genal furrow 15, 50  
— labralis longitudinalis — longitudinal furrow of labrum 42  
— — transversalis — transversal furrow of labrum 42  
— mandibularis exterior — outer furrow of mandible 53  
— — interior — inner furrow of mandible 53  
— mesocoxalis — mescoxal furrow 208, 222  
— mesopleuralis — mesopleural furrow 222  
— metacoxalis — metcoxal furrow 227  
— metapleuralis — metapleural furrow 196, 227  
— pronotalis transversalis — transversal furrow of pronotum 217  
— tibialis — tibial furrow 267  
— transversalis — transversal furrow 745  
fovea tentorialis — tentorial pit 38  
*frenum* → parapteron  
frons — frons 2, 3, 15, 38, 39, 39, 78, 98, 100, 166  
frontoclypeus — frontoclypeus 5, 44, 45, 45, 103–105  
fulcrum — fulcrum 129, 584–586  
fultura — fultura 595  
funiculus — funicle 76  
furca medialis — median fork 316  
— mesosternalis — mesosternal fork 239  
— metasternalis — metasternal fork 239  
— radialis — radial fork 315  
furcasternum — furcasternum 205–207, 239  
— mesothoracale — mesothoracic furcasternum 224, 240  
— metathoracale — metathoracic furcasternum 228, 229, 231  
— prothoracale — prothoracic furcasternum 210–215, 233, 240  
furcula — furcula 413
- galea — galea 61, 63, 65, 66, 99, 101, 109, 111, 111, 116–121, 118–122, 123, 135, 135, 184  
galeolacinia — galeolacinia 64, 110, 113, 114  
gena — gena 3, 15, 32, 50, 50, 51, 96, 163  
genu — genu 253, 267  
glandula — gland 728  
— (genitalis) — Wagner's organ 585  
glans — glans 428, 429, 432  
glossa — glossa 67, 68, 70, 71, 99, 101, 107–110, 112, 112–115, 123, 148, 186, 188  
glossotheca — tongue-case 117  
gnathos — gnathos 595, 597, 598  
gonangulus — gonangulus 467  
gonapophysis — gonapophysis 404, 405, 422, 423, 553–556, 563  
— anterior — anterior gonapophysis 434  
— dorsalis — dorsal gonapophysis 404, 422, 547, 548, 618–620

- gonapophysis lateralis — lateral gonapophysis 434, 562  
— medialis — median gonapophysis 434  
— ventralis — ventral gonapophysis 405, 421, 423, 548, 618–620  
gonarcus — gonarcus 557  
gonobasis — gonobase 419, 427, 526  
gonoclavus — gonoclavus 573  
gonocondylus — gonocondyle 526  
gonocoxa — gonocoxite 526, 528, 546, 566, 567, 569, 617  
*gonoforceps* → gonocoxa  
*gonolacinia* → digitus  
gonomacula — cupping disc 526  
gonopodium — gonopodite 543, 549, 551  
*gonoporus* → porus genitalis  
gonostylus — gonostylus 424, 425, 526, 527, 531–533  
— (Hymenoptera) → valva tertia  
gonotrema — gonotreme 587  
gula — gula 28, 30, 32, 35, 48, 49, 49, 96, 97, 163
- halter — halter 200, 234  
hamulus anterior — anterior hamule 428  
— posterior — posterior hamule 428, 429  
hamus genitalis — genital hamule 392  
harpago — harpago 596, 614, 623  
haustellum — haustellum 123, 129, 130  
hemelytron — hemelytron 306, 308  
hemitergum — hemitergite 535  
humerulus — humerulus 299  
humerus — humerus 209, 667, 668  
hypandrium — hypandrium 500, 517, 518, 588, 590, 592, 621  
hypocauda — hypocauda 561  
hypocuspis — hypocuspis 557  
hypoderma — hypodermis 659  
hypoglossa — hypoglossa 148  
hypogynium — hypogynium 594  
hypomeron — hypomere 539  
hypophallus — hypophallus 455  
hypopharynx — hypopharynx 98, 100, 111, 127, 129, 131, 133, 133, 134, 134, 136–139, 141–147, 142, 143, 149, 150, 152, 155, 163, 164, 177, 187–189, 191, 192  
hypopleuron — hypopleuron 667  
hypopygium — hypopygium 591  
hypostylus — hypostylus 557  
hypotendon — hypotendon 584, 586  
hypovalva — hypovalve 544–546, 567, 569

*infraclypeus* → *praeclypeus*  
*infraepisternum* → *katepisternum*  
*instrumenta cibarii* (*pl.*) — mouthparts 2  
 — *suctoria* (*pl.*) — sucking apparatus 117  
*intercellula* — intercell 365  
*intercostula* → *vena intercubitalis*  
*interpleuron* — interpleurite 239  
*interstitium* → *area cubitalis*  
*iugum* — jugal region 325–330  
*iuxta* — *juxta* 595, 596, 598

*j* → *i*

*katepimeron mesothoracale* — lower epimeral sclerite of mesothorax 240  
 — *metathoracale* — lower epimeral sclerite of metathorax 240  
 — *prothoracale* — lower epimeral sclerite of prothorax 233, 240  
*katepisternum* — lower episternal sclerite 238  
 — *mesothoracale* — lower episternal sclerite of mesothorax 226, 233  
 — *metathoracale* — lower episternal sclerite of metathorax 231, 233  
 — *prothoracale* — lower episternal sclerite of prothorax 213, 233  
  
*labellum* — labellum 124, 125–140, 126–133, 140, 150, 150, 151, 151, 153  
*labium* — labium 67, 68, 68, 97, 136, 137, 139, 141, 143–147, 148, 155, 163, 166, 175,  
 178, 180, 183–185, 187, 191, 192, 713  
*labroepipharynx* — labroepipharynx 139  
*labrum* — labrum 3, 15, 42, 43, 43, 97, 98, 100, 105, 106, 116, 123, 125, 127–131, 137,  
 138, 140, 141, 143–147, 149, 152, 155, 160, 162, 163, 166, 180, 186–188  
*labrum-epipharynx* → *labroepipharynx*  
*lacinia* — lacinia 61, 63, 65, 66, 99, 109, 111, 118, 124, 147, 183, 184  
*lamella antevaginalis* — antevaginal plate 599  
 — *postvaginalis* — postvaginal plate 599  
*lamina* — plate 691  
 — *antennalis* — antennal appendage 89  
 — *anterior* — anterior plate 428  
 — *apicalis* — apical sclerite 586  
 — *axillaris* — axillary plate 198  
 — — *apicalis* — apical axillary plate 299  
 — — *basalis* — basal axillary plate 299  
 — — *medialis* — medial axillary plate 299, 311  
 — *basalis* — basal plate 455, 541, 542, 576  
 — *caudalis* — caudal plate 458  
 — *cercalis* — cercal plate 494  
 — *cervicalis* — cervical sclerite 195  
 — — *lateralis* — lateral cervical sclerite 195, 196, 215  
 — — *medialis* — median cervical sclerite 195

- lamina cervicalis orbicularis — orbicular cervical sclerite 214, 215  
— — ventralis — ventral cervical sclerite 233  
— clypealis — clypeal plate 40  
— clypeolabralis — clypeolabral plate 46  
— dorsalis — dorsal plate 624  
— cerea — wax plate 726, 730  
— frontalis — frontal plate 38  
— frontoclypealis — frontoclypeal plate 44  
— galealis — galeal plate 61  
— genitalis — genital plate 434, 437, 439  
— glossalis — glossal plate 68  
— humeralis — humeral plate 299, 311  
— hypopharyngealis — hypopharyngeal plate 142  
— inferior — lower plate 577, 578  
— intermedialis — intermedial plate 578  
— interna — internal plate 563  
— iugalis — jugal plate 325  
— lacinialis — lacinial plate 61  
— lateralis — lateral sclerite 584  
— lunaris — lunar sclerite 584, 586  
— medialis — medial sclerite 584  
— — anterior — anterior sclerite of median vein 299  
— — posterior — posterior sclerite of median vein 299  
— ocellaris — ocellar plate 665  
— paraglossalis — paraglossal plate 68  
— pleurostomatalis — pleurostomal plate 106  
— postpetiolaris — postpetiolar plate 718  
— postspiracularis metathoracalis — postspiracular sclerite of metathorax 227  
— — mesothoracalis — postspiracular sclerite of mesothorax 198  
— proximalis — proximal plate 576  
— stridens — stridulatory plate 721  
— subanal — subanal plate 562, 565, 568, 570  
— subgenitalis — subgenital plate 391, 392, 430, 450—454, 456, 458, 460—464, 519, 520, 548, 554—556, 589  
— subspiracularis mesothoracalis — subspiracular sclerite of mesothorax 198  
— superior — upper plate 577, 578  
— supraanal — supra-anal plate 474, 565, 568, 570  
— supragenitalis — supragenital plate 447, 449  
— *tegminalis basalis* → tegmen (genitale)  
— unguirtractoralis — unguirtractor plate 268, 270, 275  
— ventralis — ventral plate 609, 624  
laminae cervicales laterales (*pl.*) — lateral cervical sclerites 233  
lamna — lamna 573  
lancea — lancet 510  
laterotergum nonum — ninth laterotergite 617

- laterotergum octavum — eighth laterotergite 617  
ligula — ligula 72, 74, 107, 137, 143, 147, 428, 429  
lima — lima 714, 715, 720  
linea — line 690  
— angulatoflexuosa postmedialis — postmedial zig-zag line 732  
— abdominalis — abdominal line 372  
— basalis longitudinalis — longitudinal basal line 732  
— — transversalis anterior — anterior transversal basal line 732  
— — — posterior — posterior transversal basal line 732  
— clypealis longitudinalis — longitudinal line of clypeus 41  
— — transversalis — transversal line of clypeus 41  
— clypeolabralis apicalis — apical line of clypeolabrum 47  
— clypeolabralis basalis — basal line of clypeolabrum 47  
— frontalis longitudinalis — longitudinal line of frons 39  
— — transversalis — transversal line of frons 39  
— frontoclypealis apicalis — apical line of frontoclypeus 45  
— — basalis — basal line of frontoclypeus 45  
— gularis transversalis — transversal line of gula 48  
— labralis longitudinalis — longitudinal line of labrum 43  
— — transversalis — transversal line of labrum 43  
— marginalis — marginal line 732  
— medialis longitudinalis — longitudinal medial line 732  
— — transversalis — transversal medial line 732  
— pronotalis longitudinalis — longitudinal line of pronotum 217  
— submarginalis longitudinalis — longitudinal submarginal line 732  
— — transversalis — transversal submarginal line 732  
— undulata postmedialis — postmedial wavy line 732  
lineae parallelae submarginales (*pl.*) — submarginal parallel lines 732  
*lingua* (Homoptera) → stylus (analis)  
— spiralis — spiral tongue 116  
lobulus vaginalis — vaginal lobe 600  
lobus — lobe 689  
— analis — anal lobe 414, 435, 558  
— anticus — anterior lobe 525  
— apicalis — apical lobe 590  
— appendicularis → appendicula analis  
— axillaris exterior — outer axillary lobe 369  
— — interior — inner axillary lobe 369  
— basalis — basal lobe 522, 523  
— — (Coleoptera) → tegmen (genitale)  
— cercalis — cercal lobe 433  
— clypealis — clypeal lobe 40  
— clypeolabralis — clypeolabral lobe 46  
— convergens — convergent lobe 525  
— coxalis anterior — fore coxal lobe 262, 263

- lobus coxalis (genitalis) — coxal lobe (genital) 574  
— — posterior — hind coxal lobe 262, 263  
— — — dorsalis — dorsal lobe 524  
— — — femoralis basalis interior — lower basal lobe of femur 266  
— — — — superior — upper basal lobe of femur 266  
— — — dorsoapicalis — dorsoapical lobe of femur 266  
— — — ventroapicalis — ventroapical lobe of femur 266  
— — frontalis — frontal lobe 38  
— — frontoclypealis — frontoclypeal lobe 44  
— — galealis — galeal lobe 61  
— — genalis — genal lobe 50  
— — genitalis — genital lobe 408, 439, 482, 485, 487, 544, 545, 561, 572  
— — — dorsalis — dorsal genital lobe 521  
— — — — exterior — external genital lobe 428  
— — — — inferior — lower genital lobe 601—606  
— — — — interior — internal genital lobe 428  
— — — — intermedialis — intermedial genital lobe 603, 605, 606  
— — — — superior — upper genital lobe 601—603, 605, 606  
— — — ventralis — ventral genital lobe 521, 557  
— — — intersegmentalis — intersegmental lobe 585  
— — — lacinialis — lacinial lobe 61  
— — — lateralis — lateral lobe 509, 511, 512, 523—525, 626  
— — — maxillaris — maxillary lobe 183, 185  
— — — — exterior — external maxillary lobe 95  
— — — — interior — internal maxillary lobe 95  
— — — medialis — medial lobe 509, 511—513  
— — — medianus — median lobe 525  
— — — molaris — molar lobe 53  
— — — parapenialis — parapenial lobe 527  
— — — phallicus dorsalis — dorsal phallic lobe 460, 461  
— — — — lateralis — lateral phallic lobe 461  
— — — — ventralis — ventral phallic lobe 460, 461  
— — — pleurostomatalis anterior — anterior lobe of pleurostoma 51  
— — — — posterior — posterior lobe of pleurostoma 51  
— — — posticus — posterior lobe 525  
— — — spiracularis anterior — anterior lip 703  
— — — — posterior — posterior lip 703  
— — — subanalis — subanal lobe 438, 440, 443, 445  
— — — — exterior — outer subanal lobe 439  
— — — — interior — inner subanal lobe 439  
— — — subgenitalis — subgenital lobe 437, 439, 440, 443—446, 465, 549—551, 558, 559, 561, 570, 573  
— — — — medialis — medial subgenital lobe 610, 612  
— — — — lateralis — lateral subgenital lobe 610, 612  
— — — — sublateralis — sublateral lobe 525

- lobus submental is — submental lobe 67  
— subtrochanteralis anterior — anterior lobe of subtrochanter 265  
— — posterior — posterior lobe of subtrochanter 265  
— supraanal is — supra-anal lobe 438—440, 442, 444—446, 448, 498, 499  
— supragenital is — supragenital lobe 612  
— tarsalis — tarsal lobe 268  
— trochanteralis anterior — anterior lobe of trochanter 264  
— — posterior — posterior lobe of trochanter 264  
— ventralis — ventral lobe 459, 589  
— vesicae — vesical lobe 615  
lorum — lorum 5, 107, 108  
lumen — lumen 727, 729
- macula discalis medialis — medial discal spot 731  
— irregularis basalis — basal irregular spot 731  
— — costalis — costal irregular spot 731  
— — postmedialis — postmedial irregular spot 731  
— — radialis — radial irregular spot 731  
— — submarginalis — submarginal irregular spot 731  
— ovata submarginalis — submarginal oval spot 731  
mandibula — mandible 15, 52, 52, 53, 53—60, 95, 97, 98, 102, 103, 106, 109, 124, 125, 136, 144—147, 161, 163, 166, 174—179, 184, 186, 188, 192  
mandibulae (*pl.*) — mandibles 141, 164  
manica — manica 595, 597  
manubrium — manubrium 413, 416, 497, 524  
margo — margo 596  
maxilla — maxilla 61, 61, 105, 106, 127, 136—138, 144—146, 163, 165, 166, 174—182, 186, 188, 191  
maxillae (*pl.*) — maxillae 141, 164  
media — median vein 298, 299, 302, 303, 307, 309—313, 316—318, 320  
— anterior — anterior median vein 300  
— posterior — posterior median vein 300  
— prima — first median vein 302, 313  
— quarta — fourth median vein 302  
— quinta — fifth median vein 302  
— secunda — second median vein 302, 313  
— sexta — sixth median vein 302  
— tertia — third median vein 302  
medigynium — medigynium 573, 573  
*mediproboscis* → haustellum  
medisternum primum — first medisternite 507  
— secundum — second medisternite 507  
mediuncus — mediuncus 557  
membrana — membrane 306—308, 589, 655  
— apicalis — apical membrane 585

- membrana intersegmentalis — intersegmental membrane 718, 747  
— intersternalis — intersternal membrane 507  
— specularis — specular membrane 714  
— tympanalis — tympanal membrane 710, 712  
mentum — mentum 28, 68–74, 98–100, 104–110, 149, 152–154  
meron — meron 261  
*mesepimeron* — *mesepimeron* 196, 198, 200, 222, 225, 234  
*mesepisternum* — *mesepisternite* 195, 196, 198, 200, 222, 223, 225  
*mesocorium* — *mesocorium* 308  
*mesocoxa* — middle coxa 2, 195, 196, 198, 200, 201, 209, 224–226, 233, 235–239  
*mesonotum* — *mesonotum* 1, 193–196, 208, 222, 241  
*mesopleuron* — *mesopleuron* 193–195, 208, 209, 222, 225, 237  
*mesoscutellum* — *mesoscutellum* 198, 222, 242  
*mesoscutum* — *mesoscutum* 198, 209, 222, 242  
*mesosoma* — *mesosoma* 541, 542  
*mesosternum* — *mesosternum* 1, 193, 195, 198, 208, 225, 234, 236, 239  
*mesotergum* → *mesonotum*  
*mesothorax* — *mesothorax* 193–195, 222, 222–226  
*mesotrochanter* — middle trochanter 209  
*mesotrochantinus* — *mesotrochantin* 195, 222, 233, 239  
*mesovertex* — *mesovertex* 3  
*mesozona* — *mesozona* 196  
*metacoxa* — hind coxa 2, 195, 196, 198, 200, 201, 227, 229, 229, 231, 233, 235–239, 372  
*metanotum* — *metanotum* 1, 193–196, 227, 241  
*metaparameron* — *metaparamere* 482  
*metapleuron* — *metapleuron* 193–195, 198, 227  
*metapygidium* — *metapygidium* 497  
*metascutellum* — *metascutellum* 198, 227, 242  
*metascutum* — *metascutum* 198, 227, 242  
*metasternum* — *metasternum* 1, 193–195, 198, 230, 232, 234–236  
*metatarsus* — *metatarsus* 254, 268  
*metatergum* → *metanotum*  
*metathorax* — *metathorax* 193–195, 227, 227–232  
*metatrochanter* — hind trochanter 227  
*metatrochantinus* — *metatrophantin* 195, 227, 236, 238  
*metavertex* — *metavertex* 3  
*metazona* — *metazona* 196  
*metepimeron* — *metepimeron* 196, 198, 200, 227, 234, 235  
*metepisternum* — *metepisternite* 195, 196, 198, 227, 228, 229, 231  
*microsculptura* — *microsculpture* 629–650  
*mola* — molar 52  
*mucro* — mucro 413, 416  
*mystax* — mystax 666

*neala* → *regio iugalis*

nervus sensillaris — sensory nerve 657, 658

nodulus — nodule 336

nodus — node 715

notum — notum 196, 204, 667, 668

occiput — occiput 15, 28, 50, 51

ocellus — ocellus 665

— lateralis — lateral ocellus 3

— medialis — median ocellus 3

ocelli stemmati — lateral ocelli 25

oculi glomerati — glomerate eyes 25

oculus — eye 1–3, 15, 28, 125, 162, 185

*oedagus* → aedeagus

*oedoaeagus* → aedeagus

oesophagus — oesophagus 98, 100, 104, 105

ommatidium — facet of eye 26

operculum — operculum 473, 475, 477, 478, 479, 481

*opisthomeron* → pygidium

*orificium vaginale* (Siphonaptera) → gonotrema

ostiolum odoriferum — scent aperture 727, 729

— laccae — lac aperture 730

ostium bursae — vaginal aperture 599

— *genitale* → porus genitalis

ovarium — ovary 399, 505, 599

*ovicauda* → ovipositor

oviductus — oviduct 409, 468, 469

ovipositor — ovipositor 1, 400, 400, 402, 403, 403, 420, 436, 437, 457, 466, 467, 468, 469, 470, 470–472, 531, 533, 535, 536, 547, 548, 561, 577, 593, 617, 618–620, 624, 627

palatum laterale — lateral palate 143

— mediale — median palate 143

pallium — pallium 391

*palpus genitalis* → gonostylus

— labialis — labial palp 68, 69, 95, 96, 98–101, 103, 107–114, 123, 125, 180–182, 186

— maxillaris — maxillary palp 61–64, 62, 95–97, 99, 101, 103, 107–109, 111, 118, 119, 121, 123–129, 131, 135, 141, 155, 180, 183–185, 192, 722

papilla analis — anal papilla 599, 600

*paraclypeus* → postclypeus

paraglossa — paraglossa 67, 68, 70, 71, 99, 101, 107–109, 112, 123, 188

paramera (*pl.*) — parameres 390

parameron — paramere 392, 482, 487, 530, 538, 539, 541, 542, 544–546, 552, 557, 566, 575, 591, 592

— anterius — anterior paramere 589, 590

- parameron externum* → metaparameron  
— dorsale — dorsal paramere 574  
— posterius — posterior paramere 589, 690  
— ventrale — ventral paramere 574  
paranotum mesothoracale — mesothoracic paranotum 195  
— metathoracale — metathoracic paranotum 195  
paraphallus — paraphallus 588, 589  
paraphysis — paraphysis 132, 148  
paraproctum — paraproct 372, 389, 391, 400, 403, 413, 419, 425, 436, 438, 446–449,  
    459–461, 465, 467, 475, 497, 502, 519, 520, 556, 577, 578, 621  
parapteron epimerale — subalare 298  
— episternale — basalare 298  
— mesepimerale — fore subalare 222  
— mesepisternale — fore basalare 222  
— metepimerale — hind subalare 227, 298  
— metepisternale — hind basalare 227, 298  
*parastigma* → pterostigma  
parasternum prothoracale — prothoracic parasternite 212  
patella — patella 296  
pecten tibialis — tibial comb 296  
— stridens — stridulatory comb 719  
pedicellus — pedicel 76, 77, 104, 723, 724  
pedunculus — pedunculus 595  
peniculus — peniculus 596  
penis — penis 390–392, 425, 441, 503, 508, 526, 528, 538, 541, 542, 549, 576, 588,  
    589, 601, 602  
penuncus — penuncus 566  
periandrium — periandrium 575  
perigynium — perigynium 409  
periphallus — periphallus 408  
peritrema — peritreme 704  
pes — leg 253, 254  
phallobasis — phallobase 389, 391, 393–395, 397, 529, 530, 566, 581  
phallocrypta — phallocrypt 393, 395  
phallomeron primum — first phallomere 454, 456  
— secundum — second phallomere 456  
phallotheca — phallotheca 389, 393, 396, 398, 581, 613, 615, 616  
phallotrema — phallotreme 393, 394, 459, 581, 623  
phallus — phallus 393, 393–398, 432, 463, 613, 615, 616  
phragma hypopharyngeale — hypopharyngeal membrane 142  
— intersegmentale abdominale — abdominal intersegmental membrane 548, 571  
— — coxosternale — coxosternal intersegmental membrane 748  
— — pleurosternale — pleurosternal intersegmental membrane 748  
— — tergopleurale — tergopleural intersegmental membrane 748  
— *labiohypopharyngeale* → phragma hypopharyngeale

- phragma palpi labialis intersegmentale — intersegmental membrane of labial palp 69  
— maxillaris intersegmentale — intersegmental membrane of maxillary palp 62  
— pseudotracheale — pseudotracheal membrane 132
- pileolus — pileolus 457
- pilus — hair 652
- palpi maxillaris — hair of maxillary palp 62
- placodeum — placodeum 678
- planta — sole 253
- pulvillata — plantar surface 269
- plectrum — plectrum 713
- pleuron — pleuron 202, 206, 259, 748, 749
- pleurosternum — pleurosternum 236–238
- metathoracale — metathoracic pleurosternum 239
- prothoracale — prothoracic pleurosternum 240
- pleurostoma — pleurostoma 15, 48, 51, 51
- plica analis* → plica vannalis
- *anoiugalis* → plica iugalis
- basalis — basal fold 325
- vannalis — vannal fold 303–305, 321
- *dividens* → plica vannalis
- iugalis — jugal fold 303, 305, 321, 325
- pollex — pollex 596
- pons valvularum — pons valvularum 467
- ponticulus — bridge 699
- coxalis — coxal bridge 199
- genitalis — genital bridge 592
- gularis — gular bridge 34
- postgenalis — postgenal bridge 33
- tergoabdominalis sextus — sixth tergoabdominal bridge 570
- porta — opening of Johnston's organ 722–724
- atrii — atrial orifice 703, 705–707
- epistomatalis — mouth opening 100, 129
- tympanalis — tympanal orifice 709, 710
- porus genitalis — genital pore 393, 394, 399, 401, 410, 413, 452, 459, 505, 507, 508, 514,  
515, 587, 609, 615
- postcosta* → subcosta
- postclypeus — postclypeus 40, 162, 166
- postcubitus — postcubital vein 298, 299, 302, 303, 309–311
- postfrons — postfrons 39
- postgena — postgena 48–50
- postgula — postgula 48, 49
- postlabium* → postmentum
- postlabrum — postlabrum 42
- postmentum — postmentum 95, 126
- postnotum — postnotum 204, 298, 299

- postnotum mesothoracale — mesothoracic postnotum 195, 196  
— metathoracale — metathoracic postnotum 195, 196  
— *prothoracale* → metazona  
postocciput — postocciput 15, 28, 51  
*postparapteron* → parapteron metepimerale  
*postpectus* → metasternum  
postscutum mesothoracale — mesothoracic postscutum 222  
— metathoracale — metathoracic postnotum 227  
poststernum mesothoracale — mesothoracic poststernite 224  
— metathoracale — metathoracic poststernite 228, 229, 240  
— prothoracale — prothoracic poststernite 212  
posttrochanter — posttrochanter 265  
postuncus — postuncus 525  
prae- — see also *pro-*  
*praeatrium* (Homoptera) → harpago  
praeclypeus — preclypeus 40  
praecosta — precostal vein 302, 312  
praecoxa — fore coxa 2, 195, 196, 198, 200, 201, 210–212, 214, 713  
praefrons — prefrons 39  
praegula — pregula 48, 49  
praelabrum — prelabrum 42  
*praelabrum* (Diptera) — proboscis  
praementum — prementum 68, 74, 95, 99, 101, 112, 126, 131–133, 143, 148, 149, 153  
*praeparapteron* → parapteron metepisternale  
*praeputium* → iuxta  
praescutum — prescutum 206, 298, 299  
— mesothoracale — mesothoracic prescutum 222, 224  
— metathoracale — metathoracic prescutum 198, 227  
praesternum — presternite 204–207  
— mesothoracale — mesothoracic presternite 223, 224  
— metathoracale — metathoracic presternite 228, 229, 231  
— prothoracale — prothoracic presternite 211–213, 233, 234  
praetarsus — pretarsus 254, 268, 270  
praetergum — pretergite 206  
praetrochanter — fore trochanter 210  
praetrochantinus — pretrochantin 195  
praevertex — prevertex 3  
pro- — see also *prae-*  
proboscis — proboscis 111, 113–117, 123, 129, 131, 136–139, 144–146, 149, 152, 153, 154, 182, 183, 189, 188–192  
processus abdominalis — abdominal process 572  
— analis — anal process 616  
— apicalis — apical process 623  
processus articulationis postoccipitalis — process of postoccipital articulation 28  
— *basalis* → transtilla

- processus clypeolabralis — clypeolabral process 47  
— coniunctivi — conjunctival appendage 615  
— coxalis — coxal process 263  
— coxopleuralis — coxopleural process 204, 257, 260  
— coxosternalis — coxosternal process 259  
— cuticularis noncellularis — noncellular cuticular process 629–650  
— — unicellularis — unicellular cuticular process 651–654  
— epiphallaris — epiphallic process 574, 575  
— externalis multicellularis — multicellular external process 685–694  
— externus — external process 656, 657  
— frontalis apicalis — apical process of frons 39  
— — basalis — basal process of frons 39  
— frontoclypealis apicalis — apical process of frontoclypeus 45  
— — basalis — basal process of frontoclypeus 45  
— genalis — genal process 50  
— *genitalis* → metaparameron  
— internalis multicellularis — multicellular internal process 695–702  
— internus — internal process 656  
— lobi femoralis dorsoapicalis — process of dorsoapical lobe of femur 266  
— — — superiolateralis — process of superiolateral lobe of femur 266  
— — — ventroapicalis — process of ventroapical lobe of femur 266  
— — genitalis — process of genital lobe 601, 604  
— — *subanalis* → tigellus  
— mandibularis — mandibular process 52  
— *medialis* → epiproctum  
— *medius* → stylus  
— mentalis — mental process 67  
— mesopleuralis dorsalis — dorsal process of mesopleuron 222  
— mesoscutalis anterior — anterior process of mesoscutum 222  
— metacoxopleuralis — metacoxopleural process 227  
— papilliformis — papilliform process 564  
— phallothecae — phallothecal appendage 615  
— pleuralis dorsalis — dorsal pleural process 206  
— — ventralis — ventral pleural process 206  
— scapalis — process of scape 77  
— scutalis antemedialis — antemedial process of scutum 206  
— — anterior — anterior process of scutum 206  
— — *medialis* — medial process of scutum 206  
— — posterior — posterior process of scutum 206  
— — posteromedialis — posteromedial process of scutum 206  
— spiracularis — filter apparatus 704, 705, 708  
— sternalis — sternal process 409  
— sternopleuralis — sternopleural process 202–204  
— stipitalis — stipital process 61  
— tarsalis — tarsal process 268

- processus tergalis — tergal process 500  
— terminalis — terminal process 616, 623  
— vesicae — vesical appendage 615  
proctiger — proctiger 550–552, 579, 580, 582, 590, 614  
proepimeron — proepimeron 210, 234, 237, 238  
*proepimerum* → proepimeron  
proepisternum — proepisternite 210  
pronotum — pronotum 1, 193–196, 198, 210, 216, 217, 241, 242  
prophallus — prophallus 428, 429, 432  
propleuron — propleuron 193–196, 198, 210  
*propodeon* → propodeum  
propodeum — propodeum 196, 198, 200, 206  
prosternum — prosternum 1, 193–195, 200, 236, 238  
*prostethium* → prosternum  
prothorax — prothorax 193–195, 210, 210–221, 239, 240  
*protothorax* → prothorax  
prozona — prozona 196  
pseudepiphallus — pseudepiphallus 460  
pseudopenis — pseudopenis 539  
*pseudophallus* → phallus  
pseudosternum — pseudosternite 461  
*pseudostylus* → ampulla  
*pseudovipositor* (Trichoptera) → tergosternum decimum  
pterostigma — pterostigma 312  
pterothorax — pterothorax 2, 239, 240  
pulmonarium — pulmonary space 376, 572  
pulvillus — pulvillus 276–278  
punctum submarginale — submarginal dot 731  
pygidium — pygidium 433, 489, 490–493, 494, 497  
pygofer — pygofer 613, 616, 625, 626
- radius — radial vein 298–300, 302, 303, 310, 311, 314, 319, 320  
radius et media — radial and median vein 310  
— medialis — middle radial vein 301  
— primus — first radial vein 302, 309, 312, 313  
— quartus — fourth radial vein 302, 313  
— secundus — second radial vein 302, 309, 312, 313  
— tertius — third radial vein 302, 312, 313  
radula — raster 154  
ramus cingularis — ramus of cingulum 459  
— externus — outer ramus 428, 429  
— internus — inner ramus 428, 429  
— proximalis — proximal arm 585  
receptaculum seminis — spermatheca 399, 505, 515, 593  
rectum — rectum 392, 399, 452, 503, 508, 514, 515, 565, 593, 595, 599, 613, 621

- regio axillaris — axillary region 299, 304  
— iugalis — jugal region 304, 305, **325**, 325–330  
— remigialis — remigial region 304, 305, **311**, 311  
— vannalis — vannal region 299, 304, 305, **321**, 321–324  
*remigium* → regio remigialis  
reticulum femorale — femoral reticulation 266  
— lobi genitalis — reticular comp of genital lobe 485  
*rhinarium* (Odonata) — praeclypeus  
rima genitalis — genital excision 482  
rostellum — rostellum 595  
rostrum — rostrum **103–106**, 129, 130, 148, 155, 162  
— (*genitale*) → saccus  
ruga — ruga 586
- sacculus — sacculus 595–598  
soccus — soccus 595–597  
sarothrum — sarothrum 296  
scaphium — scaphium 595, 596  
scapula — scapula 299  
scapus — scape 76–80, 96, 104, 105, 723, 724  
scolopodium — scolopale 710  
scolopophora — scolopophore **709–710**  
scopa — brush 296  
— palpi maxillaris — brush of maxillary palp 95  
scrobiculus — scrobe 103  
scutellum — scutellum 200, 206, 299, 667, 668  
scutum — scutum 2, 200, 206, 298, 299  
sector radii — sectorial crossvein 302, 303, 309, 310, 312, 319  
segmentatio — segmentation **716–720**  
sensilla trichodea (*pl.*) — sensilla trichodea **655–658**  
sensillum epidermatale — simple hair sensillum 655  
— intraepidermatale — intraepidermal sensillum 656  
— subepidermatale — subepidermal sensillum 657  
*series cellularis apicalis* → area apicalis  
— — *costalis* → area costalis  
— — *medialis* → area medialis  
— — *postcubitalis* → area postcubitalis  
— — *radialis* → area radialis  
— — *subcostalis* → area subcostalis  
— denticulorum — row of pegs 716, 717  
— linearis antemedialis — row of antimedial lines 732  
— maculorum apicalium — row of apical spots 731  
— punctorum apicalium — row of apical dots 731  
serra apicalis — apical saw 577  
seta — bristle **653**, 655, 658, 659

- seta acrostichalis — acrostichal bristle 668  
— antennalis — antennal bristle 88  
— antevverticalis — antevvertical bristle 666  
— *antennalis* (Diptera) → arista  
— apicalis — apical bristle 585  
— discoscutellaris — discoscutellar bristle 668  
— dorsocentralis — dorsocentral bristle 668  
— frontalis — frontal bristle 666  
— humeralis — humeral bristle 667, 668  
— hypopleuralis — hypopleural bristle 667  
— *interfrontalis* → seta frontalis  
— intraalaris — intra-alar bristle 668  
— mesocoxalis — mescoxal bristle 667  
— mesopleuralis — mesopleural bristle 667  
— metacoxalis — metacoxal bristle 667  
— notopleuralis — notopleural bristle 667, 668  
— occipitalis exterior — outer occipital bristle 665  
— — interior — inner occipital bristle 665  
— ocellaris — ocellar bristle 665  
— orbitalis inferior — lower orbital bristle 666  
— — superior — upper orbital bristle 666  
— palpi maxillaris — bristle of maxillary palp 62  
— peristomatalis — peristomial bristle 666  
— postalaris — postalar birstle 667, 668  
— posthumeralis — posthumeral bristle 667, 668  
— postscutellaris — postscutellar bristle 667  
— postverticalis — postvertical bristle 665  
— praealaris — prealar bristle 667  
— praecoxalis — precoxal bristle 667  
— praesuturalis — presutural bristle 668  
— praetarsalis — pretarsal bristle 274  
— propleuralis — propleural bristle 667  
— pteropleuralis — pteropleural bristle 667  
— scapalis — bristle of scape 77  
— scutellaris apicalis — apical scutellar bristle 668  
— — basalis — basal scutellar bristle 668  
— — lateralis — lateral scutellar bristle 668  
— — *praeapicalis* — preapical scutellar bristle 668  
— — subapicalis — subapical scutellar bristle 668  
— sternopleuralis — sternopleural bristle 667  
— stigmatical — stigmatic bristle 667  
— supraalaris — supra-alar bristle 667, 668  
— tarsalis — tarsal bristle 274  
— tibialis — tibial bristle 267  
— verticalis exterior — outer vertical bristle 665



- sternum duodecimum — twelfth sternite 408, 409  
— nonum — ninth sternite 372, 391, 400, 414, 421, 425, 438, 447, 454, 463, 474, 502, 503, 505, 514, 515, 521, 553, 557, 564, 565, 568, 569, 571, 579, 580, 582, 585, 594, 603, 604, 609, 610, 614  
— octavum — eighth sternite 372, 391, 407, 427, 450, 452, 502, 505, 508, 515, 521, 544, 556, 563, 579, 582, 585, 587, 591, 602, 607, 608, 610, 613, 617, 625  
— primum — first sternite 372  
— quartum — fourth sternite 372  
— quintum — fifth sternite 372, 571  
— secundum — second sternite 372, 572  
— septimum — seventh sternite 372, 427, 505, 514, 540, 548, 559, 561, 562, 564, 572  
— sextum — sixth sternite 372, 570  
— tertium — third sternite 372, 516  
— undecimum — eleventh sternite 408  
*stigma* → pterostigma  
*stilus* → stylus  
stipes — stipes 61–66, 99, 101, 107–109, 111, 118–122, 126, 129  
— (genitalis) — stipes (genital) 408  
styloideum — styloideum 617  
stylus — style 404, 405, 408–410, 418–423, 427, 434, 437, 454, 456, 504, 514, 515, 540, 544, 545, 565, 567, 589, 625  
— (Neuroptera) → processus papilliformis  
*subalare* → parapteron epimerale  
subalveolus — subalveole 656  
subatrium — subatrium 708  
subcosta — subcostal vein 298, 299, 302, 303, 309–311, 314  
subcoxa — subcoxa 263  
submentum — submentum 28, 31, 68, 71–74, 98, 100, 107–109  
subscaphium — subscaphium 595  
subtrochanter — subtrochanter 265  
*supraepisternum* → anepisternum  
surstylus — surstylus 588, 589  
sutura — suture 695, 696  
— acrotergalis — acrotergal suture 202, 204  
— anapleuralis — anapleural suture 235, 239  
— antecostalis — antecostal suture 206  
— antennalis — antennal suture 3, 50  
— basicostalis — basicostal suture 261  
— — anterior — anterior basicostal suture 262, 263  
— — posterior — posterior basicostal suture 262, 263  
— basicoxalis — basicoxal suture 263  
— cardinostipitalis — cardinostipital suture 61  
— clypeogenalis — clypeogenal suture 3, 15, 40, 44  
— clypeolabralis — clypeolabral suture 3, 15, 41, 43  
— — apicalis — apical suture of clypeolabrum 47

- sutura clypeolabralis basalis — basal suture of clypeolabrum 47  
— coronalis anterior — anterior coronal suture 3  
— — posterior — posterior coronal suture 3, 28  
— coxalis — coxal suture 260, 263, 748, 749  
— *epicranialis* → sutura coronalis anterior et posterior  
— *epistomatalis* → sutura frontoclypealis  
— frontoclypealis — frontoclypeal suture 3, 15, 41, 45  
— — anterior — anterior suture of frontoclypeus 45  
— frontoverticalis — frontovertical suture 3, 15, 38, 44  
— furcasternalis — furcasternal suture 205  
— gularis — gular suture 28, 48  
— *marginalis* → sutura subgenalis  
— mentalis — mental suture 68  
— mesocoaxalis — mesocoaxal suture 200  
— mesonotalis — mesonotal suture 196, 208  
— mesopleuralis — mesopleural suture 196, 198, 225  
— metapleuralis — metapleural suture 198, 200  
— metasternalis — metasternal suture 228  
— notalis — notal suture 204  
— occipitalis — occipital suture 15, 28, 33, 50  
— paracoxalis — paracoxalis suture 235  
— parapsidalis — parapsidal furrow 200  
— pleuralis — pleural suture 204, 206, 235, 260, 298  
— postfrontalis — postfrontal suture 3, 15  
— postoccipitalis — postoccipital suture 15, 28  
— praecoxalis — precoxal suture 210  
— praescutalis — prescutal suture 206  
— praesternalis — presternal suture 205–207  
— praetergalis — pretergal suture 206  
— pronotalis anteromedialis — anteromedial suture of pronotum 216  
— — lateralis — lateral suture of pronotum 217  
— — transversalis — transversal suture of pronotum 216, 217, 219  
— propleuralis — propleural suture 210  
— prosternalis — prosternal suture 234  
— prozonalis — prozonal suture 196  
— scutalis anterior — anterior tergal fissure 200  
— — posterior — posterior tergal fissure 200  
— scutellaris — scutellar suture 206  
— sternalis — sternal suture 205–207, 234, 235, 749  
— sternocostalis — sternocostal suture 211  
— sternopleuralis — sternopleural suture 204–207, 209  
— subantennalis — subantennal suture 3, 15, 50  
— subcoxalis — subcoxal suture 263  
— subgenalis — subgenal suture 15, 50, 51  
— submentalis — submental suture 68

- sutura subocularis — subocular suture 3, 15, 50  
— verticalis longitudinalis — longitudinal suture of vertex 3  
— — transversalis — transversal suture of vertex 3
- tarsomeron mediale — median subjoint of tarsus 254, 268  
tarsus — tarsus 253, 268, 268, 296  
*tectum* (Mecoptera) → epandrium  
tegmen — tegmen 309, 344  
— abbreviatum — abbreviated tegmen 248  
— elongatum — elongate tegmen 249  
— (genitale) — tegmen (genital) 508, 510–513  
tegula — tegula 196, 299  
tegumen — tegumen 597  
telomeron — telomere 538  
tenaculum — clasp 415, 517  
tendon — tendon 522  
*terebella* → stylus  
terebra — terebra 434  
terga abdominalia (*pl.*) — abdominal tergites 1, 372  
tergosternum decimum — tenth tergosternite 440, 571, 607, 611  
— nonum — ninth tergosternite 441, 442, 607, 608  
— octavum — eighth tergosternite 572  
— sextum — sixth tergosternite 567  
tergum — tergite 202, 746, 748  
— abdominale — abdominal tergite 374  
— — primum — first abdominal tergite 718  
— decimum — tenth tergite 372, 391, 400, 412, 414, 419, 424, 425, 427, 433, 435, 439, 442, 444–446, 448–452, 454, 456, 458, 459, 465, 473, 474, 479, 480, 488, 497, 499, 500, 501, 503–505, 507, 508, 534, 559, 560, 563, 564, 568, 572, 574, 577, 578, 594, 595, 601, 605, 606, 610  
— nonum — ninth tergite 372, 391, 404, 406, 413, 419, 420, 422, 424, 427, 434, 436, 443–446, 450–453, 459, 465, 481, 499, 504, 507, 508, 514, 515, 517–519, 543, 544, 546, 548–550, 553–557, 559, 560, 563, 564, 568, 570, 572, 574, 577, 578, 580, 589, 595, 601, 602, 605, 606, 610, 617, 625  
— octavum — eighth tergite 372, 405, 407, 423, 427, 434, 436, 437, 444, 450–453, 459, 503, 507, 508, 521, 556, 559, 561, 562, 564, 570, 571, 577, 578, 583, 589, 591, 599, 607, 617  
— primum — first tergite 372, 428, 429, 572, 711  
— quartum — fourth tergite 372  
— quintum — fifth tergite 372, 572  
— secundum — second tergite 372, 429  
— septimum — seventh tergite 372, 427, 451, 571, 728  
— sextum — sixth tergite 372, 516, 570, 571, 728  
— tertium — third tergite 372, 429  
— undecimum — eleventh tergite 574

- theca — theca 588, 589  
thecabasis — phallic tube 393  
theca labellaris — labellar theca 127, 138  
thorax — thorax 1, **193**, 254, 310  
tibia — tibia 253, 254, 256, **267**, 267, 268, 294, 295, 717, 720  
tigellus — tigellus 438  
tigillum — tigillum 142, 143  
titillator — titillator 389, 455, 461, 574, 601–603  
*titillator* (Plecoptera) → specillum  
trachea — trachea 704–707  
— tympanalis anterior — anterior tympanal trachea 710  
— — posterior — posterior tympanal trachea 710  
transtilla — transtilla 595, 597, 598  
*tricha* → pilus  
trichobothrium — trichobothrium 517, 518, 545, 548, 562  
*trochantellus* → posttrochanter  
trochanter — trochanter 253, 254, 260, 261, **264**, **264**, 265, 265  
trochanter compositus — posttrochanter et subtrochanter 265  
trochanter simplex — simple trochanter 264  
trochantinus — trochantin 202, 204, 206, 258, 260, 261  
trochus — trochus 296  
tuba — tube 522  
— analis — anal tube 596, 616, 617, 625, 626  
tubus — pensis tube 584  
tympanum — auditory organ **711**, 712
- uncus — uncus 595–598  
ungues (*pl.*) — claws 269  
unguis — claw 253, 254, 268, 270, 273, 274, 277  
— (Lepidoptera) → uncus  
*uterus* → vagina
- vacuolum — vacuole 656, 657  
vagina — vagina 399, 401, 469, 505, 514, 515, 525, 587, 599  
valva — valve 507  
— (penis) — penis valve 526–528  
— (spiraculum) — membrane (spiracle) 704, 705  
— aedeagalis dorsalis — dorsal valve of aedeagus 459  
— — ventralis — ventral valve of aedeagus 459  
— *dorsalis* → valva tertia  
— inferior — lower valve 479  
— intermedialis — intermedial valve 479, 480  
— *medialis* → valva secunda  
— prima — first valve 402, 403, 407, 451, 453, 457, 465–467, 471, 472, 519, 520, 535–537, 624, 625, 627

- valva secunda — second valve 402, 406, 451, 453, 457, 465—467, 471, 519, 520, 535—537, 624, 625, 627  
— superior — upper valve 479, 480  
— tertia — third valve 402, 403, 406, 451, 453, 457, 465—467, 471, 472, 519, 520, 535, 536, 624—626  
— *ventralis* → valva prima  
valvifer — valvifer 406, 407  
— basalis — basal valvifer 533  
— medialis — medial valvifer 533  
— ventralis — ventral valviter 532  
valvula — valvula 497  
— dorsalis — dorsal valvula 531, 532  
— ventralis — ventral valvula 531, 532  
*vannus* → regio vannalis  
velum — velum 586  
vena analis furcalis apicalis — apical arm of furcate anal vein 324  
— — — basalis — basal arm of furcate anal vein 324  
— — — furcillata — furcate anal vein 322  
— — — prima — first anal vein 298, 302, 310, 321  
— — — quarta — fourth anal vein 298, 321  
— — — quinta — fifth anal vein 302  
— — — reticularis — reticulate anal vein 323  
— — — secunda — second anal vein 298, 310, 321  
— — — tertia — third anal vein 298, 303, 309, 310, 321  
— — — transversalis — anal crossvein 322  
— arcuata — first jugal vein 299, 310, 325, 329, 330  
— cardinalis — second jugal vein 299, 300, 310, 325, 329  
— humeralis — humeral vein 300  
— intercubitalis — intercubital vein 311  
— intermedialis — intermedial vein 311  
— irregularis — irregular vein 715  
— iugalis — jugal vein 309, 322  
— — — furcillata — furcate jugal vein 326  
— — — transversalis — jugal crossvein 325  
— marginalis — marginal vein 300, 301  
— mediocubitalis — mediocubital vein 319  
— praeiugalis — prejugal vein 325  
— recurrens — recurrent vein 313  
— stridens — stridulatory vein 714  
— subcostalis furcillata — furcate subcostal vein 302  
— subcubitalis — subcubital vein 307  
— transversalis — crossveinlet 314  
— — — antecubitalis — antecubital crossvein 312, 314  
— — — furcillata — furcate antecubital crossvein 313  
— — — mediocubitalis — mediocubital crossvein 311

- vena transversalis pterostigmatalis — pterostigmalic crossvein 312  
— — pterostigmatalis — pterostigmalic crossvein 312  
— — radiomedialis — radiomedian crossvein 311  
— — subcostalis — subcostal crossvein 312  
venae anales (*pl.*) — anal veins 298  
— — apicales (*pl.*) — apical group of anal veins 310  
— — basales (*pl.*) — basal group of anal veins 310  
ventrocoxa — ventrocoxa 262, 263  
vertex — vertex 1, 3, 15, 28, 100  
vesica — vesica 595, 598, 615  
vesicula — vesicle 584  
— basalis — basal vesicle 483, 487  
— seminalis — seminal vesicle 503  
— *seminalis* (Lepidoptera) → vesica  
— spermalis — sperm capsule 428, 429, 432  
vestibulum — vestibulum 599  
— genitale — genital chamber 409  
vibrissa — vibrissa 666  
vinculum — vinculum 595, 596, 598  
virga — virga 389, 391, 483, 486, 613  
— dorsalis — dorsal virga 584, 586  
— ventralis — ventral virga 584  
volsella — volsella 526  
*vomer* → vomer subanalis  
— subanalis — subanal vomer 474, 475  
vulva — vulva 525

xyphus — xyphus 209, 238

- zona apicalis — apical zone 311  
— basalís — basal zone 311  
— medialis — medial zone 311  
zygoma — zygoma 459

# ENGLISH—LATIN

The italicized numbers refer to names in the figure captions, while those in bold face to particular body parts illustrated in detail.

- abbreviate antenna — antenna abbreviata **81**
  - tegmen — tegmen abbreviatum **248**
- abdomen — abdomen **1, 2, 372**
  - abdominal denticle — denticulus abdominalis **444**
    - intersegmental membrane — phragma intersegmentale abdominale **548, 571**
    - line — linea abdominalis **372**
    - process — processus abdominalis **572**
    - sternite — sternum abdominale **374**
    - sternites — sterna abdominalia **1, 372**
    - tergite — tergum abdominale **374**
    - tergites — terga abdominalia **1, 372**
  - acanthus — acanthus **719**
  - acrosternite — acrosternum **746**
  - acrostical* → acrostichal bristle
  - acrostichal bristle — seta acrostichalis **668**
  - acrotergal suture — sutura acrotergalis **202, 204**
  - acrotergite — acrotergum **200, 202, 204, 746**
  - aculeus — aculeus **534**
  - acumen — acumen **483, 581**
  - aedeagus — aedeagus **391, 393–398, 395–398, 509–513, 529, 529, 530, 557, 565, 566, 566, 574, 575, 579, 580, 581, 582, 586, 590, 592, 598, 603, 605, 614, 621, 622, 623**
  - alar appendage* → alula
  - alimentary canal — canalis alimentaris **114, 117, 136–140, 144–147, 149–152, 154, 174–179, 183, 188, 191, 192**
  - alternately pinnate antenna — antenna inaequaliter pinnata **90**
  - alula — alula **369**
  - alveole — alveolus **655, 656, 659**
  - ampulla — ampulla **596**
  - anal appendage — appendicula analis **430**
    - area — area analis **321**
    - crossvein — vena analis transversalis **322**
    - lobe — lobus analis **414, 435, 558**
    - *orifice* → anus
    - papilla — papilla analis **599, 600**

- anal process — processus analis 616  
— spine — spina analis 596  
— tube — tuba analis 596, 616, 617, 625, 626  
— veins — venae anales 298  
anapleural suture — sutura anapleuralis 235, 239  
anapleurite — anapleuron 235  
anellus — anellus 595, 597, 598  
anepimeral sclerite of mesothorax — anepimeron mesothoracale 233, 240  
— — — metathorax — anepimeron metathoracale 240  
— — — prothorax — anepimeron prothoracale 240  
anepisternal sclerite — anepisternum 237, 238  
— — of mesothorax — anepisternum mesothoracale 233  
— — — metathorax — anepisternum metathoracale 233  
— — — prothorax — anepisternum prothoracale 213, 214, 215, 233  
anoprocess — anoprocessus 552  
anteclypeus — anteclypeus 162, 166  
antecostal suture — sutura antecostalis 206  
antecubital crossvein — vena transversalis antecubitalis 312, 314  
antemedial process of scutum — processus scutalis antemedialis 206  
antenna — antenna 1, 103, 125, 128, 141  
antennal appendage — lamina antennalis 89  
— articulation — articulatio antennalis 77  
— bristle — seta antennalis 88  
— cavity → antennal socket  
— furrow — fossa antennalis 77, 78  
— joint — articulus antennalis 77  
— socket — cavea antennalis 3, 15, 50, 77  
— suture — sutura antennalis 3, 50  
antennifer — antennifer 15  
anterior — see also first, fore  
anterior apex of pronotum — apex pronotalis anterior 216  
— articulation of coxa — articulatio coxalis anterior 262  
— — — mandible — articulatio mandibularis anterior 53  
— — — pleurostoma — articulatio pleurostomatalis anterior 15, 51  
— basal margin of subcoxa — clavus subcoxalis basalis anterior 263  
— basicostal suture — sutura basicostalis anterior 262, 263  
— coronal suture — sutura coronalis anterior 3  
— gonapophysis — gonapophysis anterior 434  
— hamule — hamulus anterior 428  
— lip — lobus spiracularis anterior 703  
— lobe — lobus anticus 525  
— — of pleurostoma — lobus pleurostomatalis anterior 51  
— — — subtrochanter — lobus subtrochanteralis anterior 265  
— — — trochanter — lobus trochanteralis anterior 264  
— margin of mesoscutum — clavus mesoscutalis anterior 222

- anterior margin of metasternum — clavus metasternalis anterior 193, 194  
— — — pleuron — clavus pleuralis anterior 206  
— — — pleurostoma — clavus pleurostomatalis anterior 51  
— — — pronotum — clavus pronotalis anterior 193, 194, 210, 217  
— — — sternopleuron — clavus sternopleuralis anterior 203  
— — — sternum — clavus sternalis anterior 203  
— — — trochanteral apex — clavus trochanteralis apicalis anterior 264  
— median vein — media anterior 300  
— ocular margin — clavus ocularis anterior 3, 15  
— paramere — parameron anterius 589, 590  
— process of mesoscutum — processus mesoscutalis anterior 222  
— plate — lamina anterior 428  
— process of scutum — processus scutalis anterior 206  
— sclerite of median vein — lamina medialis anterior 299  
— suture of frontoclypeus — sutura frontoclypealis anterior 45  
— tergal fissure — sutura scutalis anterior 200  
— transversal basal line — linea basalis transversalis anterior 732  
— tympanal trachea — trachea tympanalis anterior 710  
anterobasal jugal cell — cellula iugalis antebasalis 325  
anteromedial suture of pronotum — sutura pronotalis antemedialis 216  
antevaginal plate — lamella antevaginalis 599  
antevertical bristle — seta anteverticalis 666  
antrum — antrum 599  
anus — anus 390, 392, 399, 410, 412, 413, 425, 452, 503, 505, 508, 514, 554, 565, 568,  
583, 593, 595, 599, 613, 621  
apex of anterior lobe of coxa — apex lobi coxalis anterioris 263  
— — — — trochanter — apex lobi trochanteralis anterioris 264  
— — — — subtrochanter — apex lobi subtrochanteralis anterioris 265  
— — appendage — apex appendicularis 485  
— — galea — apex galealis 61  
— — genital lobe — apex lobi genitalis 485, 544, 545  
— — labial palp — apex palpi labialis 68, 69  
— — lacinia — apex lacinialis 61  
— — lower basal lobe of femur — apex lobi femoralis basalis inferioris 266  
— — mandible — apex mandibularis 52  
— — maxillary palp — apex palpi maxillaris 61, 62  
— — ovipositor — apex ovipositoris 400  
— — posterior lobe of coxa — apex lobi coxalis posterioris 263  
— — — — trochanter — apex lobi trochanteralis posterioris 264  
— — subgenital lobe — apex lobi subgenitalis 570  
— — supra-anal lobe — apex lobi supraanalisis 440  
— — upper basal lobe of femur — apex lobi femoralis basalis posterioris 266  
apical anal cell — cellula analis apicalis 321  
— area — area apicalis 311  
— arm of furcate anal vein — vena analis furcalis apicalis 324

- apical axillary plate — lamina axillaris apicalis 299
- buccula — buccula apicalis 163
- cell — cellula apicalis 316
- coxal cavity — cavea coxalis apicalis 262, 263
- group of anal veins — venae anales apicalis 310
- joint of labial palp — artus palpi labialis apicalis 67, 69
  - — maxillary palp — artus palpi maxillaris apicalis 61, 62, 123
- jugal cell — cellula iugalis apicalis 325
- line of clypeolabrum — linea clypeolabralis apicalis 47
  - — frontoclypeus — linea frontoclypealis apicalis 45
- bristle — seta apicalis 585
- *little cheek* → apical buccula
- lobe — lobus apicalis 590
- longitudinal furrow of clypeolabrum — fossa clypeolabralis longitudinalis apicalis 46
  - — frontoclypeus — fossa frontoclypealis longitudinalis apicalis 44
- margin of cardo — clavus cardinalis apicalis 61
  - — clypeolabrum — clavus clypeolabralis apicalis 47
  - — scape — clavus scapalis apicalis 77
  - — submentum — clavus submentalidis apicalis 68
- membrane — membrana apicalis 585
- process — processus apicalis 623
  - of frons — processus frontalis apicalis 39
  - — frontoclypeus — processus frontoclypealis apicalis 45
- radial cell — cellula radialis apicalis 312
- saw — serra apicalis 577
- sclerite — lamina apicalis 586
- scutellar bristle — seta scutellaris apicalis 668
- suture of clypeolabrum — sutura clypeolabralis apicalis 47
- zone — zona apicalis 311
- apodeme — apodema 455, 538, 539, 585, 623
- apophysis — apophysis 517, 600
- arculus — arculus 715
- arista — arista 88, 666
- arolium — arolium 268, 270–274
- articular point of antenna* → antennifer
- articulation — articulatio 750–756
  - of fore wing — articulatio alaris anterior 206
  - hind wing — articulatio alaris posterior 206
  - labial palp — articulatio palpi labialis 69, 95
  - maxillary palp — articulatio palpi maxillaris 62
- atrial orifice — porta atrii 703, 705–707
- atrium — atrium 704, 705, 706, 707, 707, 708, 708
- attenuate antenna — antenna attenuata 87
- auditory organ — tympanum 711–712
- auricle — auricula 296

auxilia — auxilia 268, 270  
axillary cell — cellula axillaris 299  
— plate — lamina axillaris 198  
— region — regio axillaris 299, 299, 304

*balancer* → halter

basal anal cell — cellula analis basalis 431  
— apodeme — apodema basalis 408, 409  
— arm of furcate anal vein — vena analis furcalis basalis 324  
— articulation of femur — articulatio femoralis basalis 266  
— axillary plate — lamina axillaris basalis 299  
— buccula — buccula basalis 163  
— coxal cavity — cavea coxalis basalis 262, 263  
— fold — plica basalis 325  
— foramen — foramen basale 615  
— group of anal veins — venae anales basales 310  
— irregular circle — circulus irregularis basalis 731  
— — spot — macula irregularis basalis 731  
— joint of labial palp — artus palpi labialis basalis 67, 69  
— — — maxillary palp — artus palpi maxillaris basalis 61, 62, 95  
— line of clypeolabrum — linea clypeolabralis basalis 47  
— — — frontoclypeus — linea frontoclypealis basalis 45  
— *little cheek* → basal buccula  
— lobe — lobus basalis 522, 523  
— — (Coleoptera) → tegmen (genitale)  
— longitudinal furrow of clypeolabrum — fossa clypeolabralis longitudinalis basalis 46  
— — — frontoclypeus — fossa frontoclypealis longitudinalis basalis 44  
— margin of cardo — clavus cardinalis basalis 61  
— — — clypeolabrum — clavus clypeolabralis basalis 46  
— — — clypeus — clavus clypealis basalis 40  
— — — labrum — clavus labralis basalis 43  
— — — mentum — clavus mentalis basalis 68  
— — — stipes — clavus stipitalis basalis 61  
— — — submentum — clavus submentalalis basalis 68  
— *piece* (Coleoptera) → tegmen (genitale)  
— plate — lamina basalis 455, 541, 542, 576  
— process of frons — processus frontalis basalis 39  
— — — frontoclypeus — processus frontoclypealis basalis 45  
— radial cell — cellula radialis basalis 312  
— scutellar bristle — seta scutellaris basalis 668  
— suture of clypeolabrum — sutura clypeolabralis basalis 47  
— valvifer — valvifer basalis 533  
— vesicle — vesicula basalis 483, 487  
— zone — zona basalis 311  
basalare — parapteron episternale 298

- base of *virga* — *basivirga* 482  
*basicercus* — *basicercus* 499  
*basicostal suture* — *sutura basicostalis* 261  
*basicoxal cavity* — *caverna basicoxalis* 262  
— furrow — *fossa basicoxalis* 262  
— suture — *sutura basicoxalis* 263  
*basicoxite* — *basicoxa* 261–263  
*basiepiphallus* — *basiepiphallus* 455  
*basisternum* — *basisternum* 205–207, 238, 239, 260  
*basistylus* — *basistylus* 408, 588, 590  
*basitarsus* → *metatarsus*  
*basivalvula* — *basivalvula* 465, 466, 468  
bifurcate apex of appendage — *apex appendicularis furcatus* 482  
body cavity — *caverna corporis* 748  
*breast of mesothorax* → *mesosternum*  
*breast of metathorax* → *metasternum*  
bridge — *ponticulus* 699  
bristle (or hair) — *seta* 653, 658, 659, 655  
— of maxillary palp — *seta palpi maxillaris* 62  
— — scape — *seta scapalis* 77  
brush — *scopa* 296  
— of maxillary palp — *scopa palpi maxillaris* 95  
*bulla seminalis* — *bulla seminalis* 599  
bursal duct — *ductus bursae* 600  
— neck — *cervix bursae* 599  
— *sac* → copulatory sac  
*bursasac* → copulatory sac
- calypter* → *alula*  
canal — *canalis* 697, 698, 729  
*canalicule* — *canaliculus* 727  
*capsula* — *capsula* 584  
cardinal cavity — *cavea cardinalis* 61  
*cardinostipital suture* — *sutura cardinostipitalis* 61  
*cardo* — *cardo* 61, 63–66, 99, 101, 107, 118–122, 126, 184  
*carina* — *carina* 586, 688  
— penis — *carina penis* 595  
*catch* → *clasp*  
*catoprocess* — *catoprocessus* 552  
*caudal filament* — *filum caudale* 424, 425, 426  
— plate — *lamina caudalis* 458  
— spine of abdomen — *spina abdominalis caudalis* 494  
*caudoepiphallus* — *caudoepiphallus* 455  
*caulis* — *caulis* 595  
*cavern* — *caverna* 701

- cavity — *cavea* 700  
central body — *corpus centrale* 522  
cercal apex — *apex cercalis* 433, 494  
— callus — *callus cerci* 552  
— denticle — *denticulus cercalis* 494, 499  
— lobe — *lobus cercalis* 433  
— plate — *lamina cercalis* 494  
— spine — *spina cercalis* 494  
cercus — *cercus* 1, 372, 389, 391, 400, 403, 410–412, 417–419, 424–427, 430, 433, 435–439, 442, 450, 451, 453, 454, 456, 458, 459, 462, 465, 467, 473, 474, 479, 480, 499, 501, 502, 504, 506, 507, 521, 543, 549, 551, 559, 560, 567, 568, 570, 588, 589, 594, 607–609, 611, 621  
cervical margin of gula — *clavus gularis cervicalis* 28  
— sclerite — *lamina cervicalis* 195  
chamber — *camera* 728, 729  
*Chapman's process* → manica  
cibarium — *cibarium* 124, 142, 143  
cingulum — *cingulum* 459, 586  
clasp — *tenaculum* 415, 517  
claspettes — *appendiculae* 591  
clavate antenna — *antenna clavata* 83  
clavus (genital) — *clavus (genitalis)* 596  
— (wing) — *clavus (alaris)* 306–308  
claw — *unguis* 253, 254, 268, 270, 273, 274, 277  
claws — *ungues* (*pl.*) 269  
*cloaca* → rectum  
club — *capitulum* 76  
clypeal callus — *callus clypealis* 40  
— carina — *carina clypealis* 40  
— cavity — *caverna clypealis* 41  
— lobe — *lobus clypealis* 40  
— plate — *lamina clypealis* 40  
clypeogenal suture — *sutura clypeogenalis* 3, 15, 40  
clypeolabral lobe — *lobus clypeolabralis* 46  
— plate — *lamina clypeolabralis* 46  
— process — *processus clypeolabralis* 47  
— suture — *sutura clypeolabralis* 3, 15, 41, 43  
clypeolabrum — *clypeolabrum* 46, 47, 47, 95, 189  
clypeus — *clypeus* 3, 15, 40, 41, 41, 98, 100, 129, 155, 180, 187  
*coiled proboscis* → spiral tongue  
collar — *collum* 195  
collum — *collum (genitale)* 585  
condyle — *condylus* 256  
conjunctival appendage — *processus coniunctivi* 615  
conjunctive — *coniunctivum* 615, 746

- connective — connectivum 661  
connexivum — connexivum 377  
convergent lobe — lobus convergens 525  
copulatory organ — corpus genitale 474, 479  
— *pouch* → copulatory sac  
— sac — bursa copulatrix (or corpus bursae 599) 515  
corbicle — corbicula 296  
corium — corium 306–308  
cornutus — cornutus 595  
corona — corona 596, 692  
costa (genital) — costa (genitalis) 595, 598  
costal area — area costalis 311, 314  
— cell — cellula costalis 312, 319  
— irregular spot — macula irregularis costalis 731  
— vein — costa (alaris) 298, 299, 302, 303, 309–312, 314  
coxa — coxa 197, 199, 203, 253, 254, 260, 261, 262, 298, 748, 749  
coxal articulation — articulatio coxalis 257–261  
— bridge — ponticulus coxalis 199  
— cavity — cavea coxalis 202, 204, 206, 259  
— furrow — fossa coxalis 262  
— lobe (genital) — lobus coxalis (genitalis) 574  
— process — processus coxalis 263  
— *socket* → coxal cavity  
— suture — sutura coxalis 260, 263, 748, 749  
coxopleural process — processus coxopleuralis 204, 257, 260  
*coxomarginale* → basicoxite  
coxopodite — coxopodium 404–406, 420–423, 425, 451, 748, 749  
coxosternal intersegmental membrane — phragma intersegmentale coxosternale 748  
— process — processus coxosternalis 259  
crossveinlet — vena transversalis 314  
cubital area — area cubitalis 311, 317  
— cell — cellula cubitalis 316, 319, 320  
— vein — cubitus 298, 299, 301–303, 309–311, 320  
cucullus — cucullus 597, 598  
cuneus — cuneus 16, 307, 308  
cupping disc — gonomacula 526  
cuspis — cuspis 528  
cuticle — cuticula 628, 655, 659, 678, 727, 730
- dens — dens 413, 416  
dentate margin of cercus — clavus denticulatus cercalis 495  
denticle — denticulus 686, 716  
— of genital lobe — denticulus lobi genitalis 485  
— — tenth tergite — denticulus tergalis decimus 444  
digitus — digitus 596

- discoidal area — area discoidalis 318  
— cell — cellula discoidalis 318  
discoscutellar bristle — seta discoscutellaris 668  
dististylus — dististylus 588, 590–592  
dorsal appendage — appendicula dorsalis 431  
— articulation of antenna — articulatio antennalis dorsalis 78  
— endotendon — endotendon dorsale 584–586  
— femoral carina — carina femoralis dorsalis 255, 266  
— genital lobe — lobus genitalis dorsalis 521  
— gonapophysis — gonapophysis dorsalis 404, 422, 547, 548, 618–620  
— lobe — lobus dorsalis 524  
— margin of pleurostoma — clavus pleurostomatalis dorsalis 51  
— — — posttrochanter — clavus posttrochanteralis dorsalis 265  
— — — subtrochanter — clavus subtrochanteralis dorsalis 265  
— — — valve — clavus valvaris dorsalis 402, 403  
— maxillary lancet — spina maxillaris dorsalis 190  
— paramere — parameron dorsale 574  
— phallic lobe — lobus phallicus dorsalis 460, 461  
— plate — lamina dorsalis 624  
— pleural process — processus pleuralis dorsalis 206  
— process of mesopleuron — processus mesopleuralis dorsalis 222  
— spine — spina dorsalis 581  
— supracoxal sclerite of mesothorax — eupleuron mesothoracale 195  
— — — metathorax — eupleuron metathoracale 195  
— — — prothoracale — eupleuron prothoracale 195  
— valve of aedeagus — valva aedeagalilis dorsalis 459  
— valvula — valvula dorsalis 531, 532  
— virga — virga dorsalis 584, 586  
dorsoapical lobe of femur — lobus femoralis dorsoapicalis 266  
dorsobasal margin of trochanter — clavus trochanteralis dorsobasalis 264  
dorsocentral bristle — seta dorsocentralis 668  
dorsocoxa — dorsocoxa 262, 263  
dorsolateral margin of femur — clavus femoralis dorsolateralis 266  
— — — mesopleuron — clavus mesopleuralis dorsolateralis 193, 194  
— — — metasternum — clavus metasternalis dorsolateralis 193, 194  
— — — pleuron — clavus pleuralis dorsolateralis 202  
duct — ductus 727, 729
- ectoproct — ectoproctum 544, 546, 548–550, 553–556, 561, 562  
editum — editum 596  
egg guide — digitulus 465  
eighth laterotergite — laterotergum octavum 617  
— sternite — sternum octavum 372, 391, 407, 427, 450, 452, 502, 505, 508, 515, 521, 544, 556, 563, 579, 582, 585, 587, 591, 602, 607, 608, 610, 613, 617, 625  
— tergite — tergum octavum 372, 405, 407, 423, 427, 434, 436, 437, 444, 450–453,

- 459, 503, 507, 508, 521, 556, 559, 561, 562, 564, 570, 571, 577, 578, 583, 589, 591, 599, 607, 617  
— tergosternite — tergosternum octavum 572  
ejaculatory bulb — bulbus ejaculatorius 459  
— duct — ductus ejaculatorius 389, 392, 393, 441, 459, 460, 508, 615  
eleventh sternite — sternum undecimum 408  
— tergite — tergum undecimum 574  
elongate tegmen — tegmen elongatum 249  
elytron — elytron 235  
embolium — embolium 307  
empodium — empodium 276, 278  
endocuticle — endocuticula 628  
endomere — endomeron 541  
endophallus — endophallus 391, 393, 396, 397, 586, 616  
endosome — endosoma 616  
endotheca — endotheca 393, 396, 398  
entoprocess — entoprocessus 557  
epandrium — epandrium 568, 588, 590  
*epicranial suture* → posterior coronal suture  
epidermis — epiderma 628, 655  
epifrons — epifrons 3, 15  
epimeron — epimeron 204, 206, 260, 261, 298, 484  
epiphalllic process — processus epiphallaris 574, 575  
epiphallus — epiphallus 463, 565, 574–576  
epipharynx — epipharynx 136, 182, 183  
epiphysis — epiphysis 132, 148  
epiproct — epiproctum 372, 389–392, 400, 403, 413, 425, 436, 438, 451, 453, 454, 458, 459, 465, 467, 502, 517, 519–521, 577  
episternite — episternum 197, 200, 204, 206, 260, 261, 298  
epistomal margin of gula — clavus gularis epistomatalis 28, 49  
— *suture* → frontoclypeal suture  
epitendon — epitendon 585  
euplantula — euplantula 268  
eusternum — eusternum 195  
exocorium — exocorium 308  
exocuticle — exocuticula 628  
external genital lobe — lobus genitalis exterior 428  
— maxillary lobe — lobus maxillaris exterior 95  
— process — processus externus 656, 657  
externomedial joint of labial palp — artus palpi labialis externomedialis 67  
— — — maxillary palp — artus palpi maxillaris externomedialis 61, 62  
— margin of cardo — clavus cardinalis externomedialis 61  
— — — stipes — clavus stipitalis externomedialis 61  
— — — submentum — clavus submentalalis externomedialis 68  
*exuvial cleavage line* → posterior coronal suture  
eye — oculus 1, 2, 3, 15, 28, 125, 162, 185

- facet of eye — ommatidium 26  
fasciculus — fasciculus 678  
fastigium — fastigium 685  
— of median ocellus — fastigium ocelli medialis 15  
femoral furrow — fossa femoralis 255, 266  
— reticulation — reticulum femorale 266  
— spur — calcar femorale 291  
femur — femur 253, 254, 255–266, 256, 266, 290, 294–296, 717, 719  
fifth anal vein — vena analis quinta 302  
— median vein — media quinta 302  
— sternite — sternum quintum 372  
— tergite — tergum quintum 372, 572  
filter apparatus — processus spiracularis 704, 705, 708  
fine hair — cilium 651, 693  
first — see also anterior, fore  
— abdominal sternite — sternum abdominale primum 234  
— — tergite — tergum abdominale primum 718  
— anal vein — vena analis prima 298, 302, 310, 321  
— *clypeus* → postclypeus  
— cubital vein — cubitus primus 302  
— jugal vein — vena arcuata 299, 310, 325, 329, 330  
— median vein — media prima 302, 313  
— medisternite — medisternum primum 507  
— phallomere — phallomeron primum 454, 456  
— radial vein — radius primus 302, 309, 312, 313  
— sternite — sternum primum 372  
— tergite — tergum primum 372, 428, 429, 572, 711  
— valve — valva prima 402, 403, 407, 451, 453, 457, 465–467, 471, 472, 519, 520, 535–537, 624, 625, 627  
fistula — fistula 585  
fixed coxa — coxa fixa 262  
*flabellum* → flagellum  
flagellum — flagellum 76  
— (genital) — flagellum (genitale) 432, 509, 510  
*food pocket* → cibarium  
forceps (see also cercus) 488, 489, 497  
fore — see also anterior, first  
— basalare — parapteron mesepisternale 222  
— basal margin of basicoxa — clavus basicoxalis basalis anterior 262, 263  
— *breast* → prosternum  
— coxa — praecoxa 2, 195, 196, 198, 200, 201, 210–212, 214, 713  
— coxal lobe — lobus coxalis anterior 262, 263  
— margin of clypeus — clavus clypealis anterior 41  
— — — coxal cavity — clavus cavi coxalis anterior 204, 206  
— — — frons — clavus frontalis anterior 39

- fore margin of frontoclypeus — clavus frontoclypealis anterior 45  
— — mesopleuron — clavus mesopleuralis anterior 193, 194, 222  
— trochanter — praetrochanter 210  
— subalare — parapteron mesepimerale 222  
— wing — ala anterior 2, 194, 242, 310  
fourth abdominal sternite — sternum abdominale quartum 235  
— anal vein — vena analis quarta 298, 321  
— median vein — media quarta 302  
— radial vein — radius quartus 302, 313  
— tergite — tergum quartum 372  
— sternite — sternum quartum 372  
free coxa — coxa libera 263  
fringe of hairs — cilia 352  
frons — frons 2, 3, 15, 38, 39, 39, 78, 98, 100, 166  
*front* → frons  
*frontal area* → frons  
— acanthus — acanthus frontalis 16  
— bristle — seta frontalis 666  
— callus — callus frontalis 38  
— carina — carina frontalis 38  
— cavity — caverna frontalis 39  
— lobe — lobus frontalis 38  
— plate — lamina frontalis 38  
frontoclypeal carina — carina frontoclypealis 44  
— lobe — lobus frontoclypealis 44  
— plate — lamina frontoclypealis 44  
— suture — sutura frontoclypealis 3, 15, 41, 45  
frontoclypeus — frontoclypeus 5, 44, 45, 45, 103–105  
frontoventral suture — sutura frontoventralis 3, 15, 38, 44  
*fulcral trut* → fulcrum  
fulcrum — fulcrum 129, 584–586  
full elytron — elytron integratum 252  
fultura — fultura 595  
funicle — funiculus 76  
*funicule* → funicle  
furcasternal suture — sutura furcasternalis 205  
furcasternum — furcasternum 205–207, 239  
furcate anal vein — vena analis furcillata 322  
— antecubital crossvein — vena transversalis antecubitalis furcillata 313  
— jugal vein — vena iugalis furcillata 326  
— mesothoracic spinasternum — spinasternum mesothoracale furcatum 226  
— subcostal vein — vena subcostalis furcillata 302  
furcula — furcula 413  
fusiform antenna — antenna fusiformis 94

- galea — galea 61, 63, 65, 66, 99, 101, 109, 111, 111, 116–121, 118–122, 123, 135, 135, 184
- galeal cavity — cava galealis 117
- lobe — lobus galealis 61
- plate — lamina galealis 61
- galeolacinia — galeolacinia 64, 110, 113, 114
- galeolacinal spine — spina galeolacinalis 64
- gena — gena 3, 15, 32, 50, 50, 51, 96, 163
- genal furrow — fossa genalis 15, 50
- lobe — lobus genalis 50
- process — processus genalis 50
- genital appendage — appendicula genitalis 390
- bridge — ponticulus genitalis 592
- canal — canalis genitalis 618–620, 622, 627
- cavity — cavea genitalis 468
- chamber — vestibulum genitale 409
- excision — rima genitalis 482
- fastigium — fastigium genitale 476
- foramen — foramen genitale 526–528
- hamule — hamus genitalis 392
- hook → genital hamule
- lobe — lobus genitalis 408, 439, 482, 485, 487, 544, 545, 561, 572
- plate — lamina genitalis 434, 437, 439
- pore — porus genitalis 393, 394, 399, 401, 410, 413, 452, 459, 505, 507, 508, 514, 515, 587, 609, 615
- genitals* → aedeagus
- genu — genu 253, 267
- gland — glandula 728
- glandular cell — cellula glandularis 729
- glans — glans 428, 429, 432
- glomerate eyes — oculi glomerati 25
- glossa — glossa 67, 68, 70, 71, 99, 101, 107–110, 112, 112–115, 123, 148, 186, 188
- glossal plate — lamina glossalis 68
- gnathos — gnathos 595, 597, 598
- gonangulus — gonangulus 467
- gonapophysis — gonapophysis 404, 405, 422, 423, 553–556, 563
- gonarcus — gonarcus 557
- gonobase — gonobasis 419, 427, 526
- gonoclavus — gonoclavus 573
- gonocondyle — gonocondylus 526
- gonocoxite — gonocoxa 526, 528, 546, 566, 567, 569, 617
- gonoforceps* → gonocoxite
- gonopodite — gonopodium 543, 549, 551
- gonopore* → genital pore
- gonostylus — gonostylus 424, 425, 526, 527, 531–533

- gonotreme — gonotrema 587  
*grinding surface of molar lobe* → molar crown  
gula — gula 28, 30, 32, 35, 48, 49, 49, 96, 97, 163  
*gular bar* → pregula  
— bridge — ponticulus gularis 34  
— *plate* → gula  
— suture — sutura gularis 28, 48  
*gullet* → oesophagus
- hair — pilus 652  
— of maxillary palp — pilus palpi maxillaris 62  
halter — halter 200, 234  
*hamule* → genital hamule  
*harpago* — harpago 596, 614, 623  
haustellum — haustellum 123, 129, 130  
head — caput 1, 2, 3  
hemelytron — hemelytron 306, 308  
*hemelytron* → hemelytron  
hemitergite — hemitergum 535  
hind — see also posterior  
— basale — parapteron metepisternale 227  
— basal margin of basicoxa — clavus basicoxalis basalis posterior 262, 263  
— coxa — metacoxa 2, 195, 196, 198, 200, 201, 227, 229, 231, 233, 235–239, 372  
— coxal lobe — lobus coxalis posterior 262, 263  
— margin of coxal cavity — clavus cavi coxalis posterior 204, 206  
— — — mesopleuron — clavus mesopleuralis posterior 193, 194, 222  
— subalare — parapteron metepimerale 227  
— trochanter — metatrochanter 227  
— *trochantin* → metatrochantin  
— wing — ala posterior 2, 194, 242, 310  
humeral bristle — seta humeralis 667, 668  
— plate — lamina humeralis 299, 311  
— vein — vena humeralis 300  
humerulus — humerulus 299  
humerus — humerus 209, 667, 668  
hypandrium — hypandrium 500, 517, 518, 588, 590, 592, 621  
hypocauda — hypocauda 561  
hypocuspis — hypocuspis 557  
*hypoderm* → hypodermis  
hypodermis — hypoderma 659  
hypoglossa — hypoglossa 148  
hypogynium — hypogynium 594  
hypomere — hypomeron 539  
hypophallus — hypophallus 455  
hypopharyngeal membrane — phragma hypopharyngeale 142

- hypopharyngeal plate — lamina hypopharyngealis 142  
hypopharynx — hypopharynx 98, 100, 111, 127, 129, 131, 133, 133, 134, 134,  
136–139, 141–147, 142, 143, 149, 150, 152, 155, 163, 164, 177, 187–189, 191,  
192  
hypopleural bristle — seta hypopleuralis 667  
hypopleuron — hypopleuron 667  
hypopygium — hypopygium 591  
hypostylus — hypostylus 557  
hypotendon — hypotendon 584, 586  
hypovalve — hypovalva 544–546, 567, 569
- imbricate antenna — antenna imbricata 92  
incrassate antenna — antenna incrassata 82  
inferior margin of trochanteral apex — clavus trochanteralis apicalis inferior 264  
inner apical margin of stipes — clavus stipitalis apicalis interior 61  
— articulation of mandible — articulatio mandibularis interior 52  
— axillary lobe — lobus axillaris interior 369  
— *covering* → endotheca  
— dorsolateral crest of femur — corona femoralis dorsolateralis interior 255  
— epistomal margin of vertex — clavus verticalis epistomatalis interior 3, 15  
— furrow of mandible — fossa mandibularis interior 53  
— margin of appendage — clavus appendicularis interior 482  
— — — cercus — clavus cercalis interior 433, 494  
— — — galea — clavus galealis interior 61  
— — — lacinia — clavus lacinialis interior 61  
— — — mandible — clavus mandibularis interior 52  
— occipital bristle — seta occipitalis interior 665  
— *orbit* → fronto-ocular area  
— ramus — ramus internus 428, 429  
— spur — calcar interius 267  
— *squama* → inner axillary lobe  
— subanal lobe — lobus subanalis interior 439  
— vertical bristle — seta verticalis interior 665  
intercell — intercellula 365  
intercubital vein — vena intercubitalis 311  
*interfrontal bristle* → frontal bristle  
interlabial channel — canaliculus interlabialis 154  
interlinear space — spatium interlineare 732  
intermedial genital lobe — lobus genitalis intermedialis 603, 605, 606  
— plate — lamina intermedialis 578  
— valve — valva intermedialis 479, 480  
intermedian vein — vena intermedialis 311  
internal genital lobe — lobus genitalis interior 428  
— maxillary lobe — lobus maxillaris interior 95  
— plate — lamina interna 563

- internal process — processus internus 656  
internomedial joint of labial palp — artus palpi labialis internomedialis 67  
— — — maxillary palp — artus palpi maxillaris internomedialis 61, 62  
— margin of cardo — clavus cardinalis internomedialis 61  
— — — stipes — clavus stipitalis internomedialis 61  
— — — submentum — clavus submentalalis internomedialis 68  
interpleurite — interpleuron 239  
intersegmental lobe — lobus intersegmentalis 585  
— membrane — membrana intersegmentalis 718, 747  
— — of labial palp — phragma palpi labialis intersegmentale 69  
— — — maxillary palp — phragma palpi maxillaris intersegmentale 62  
intersternal membrane — membrana intersternalis 507  
intra-alar bristle — seta intraalaris 668  
intraepidermal sensillum — sensillum intraepidermatale 656  
irregular vein — vena irregularis 715

*jaw* → maxilla

*jowl* → gena

- jugal crossvein — vena iugalis transversalis 325  
— fold — plica iugalis 303, 305, 321, 325  
— *lobe* → outer axillary lobe  
— margin — costa iugalis 325  
— plate — lamina iugalis 325  
— regio, — regio iugalis 304, 305, 325, 325–330  
— vein — vena iugalis 309, 322  
juxta — iuxta 595, 596, 598

*keel* → carina

*knee* → genu

*labellar case* → labellar theca

- theca — theca labellaris 127, 138  
labellum — labellum 124, 125–140, 126–133, 140, 150, 150, 151, 151, 151, 153  
labial comb — ctenidium labiale 69, 70  
— palp — palpus labialis 68, 69–75, 95, 96, 98–101, 103, 107–114, 123, 125, 180–182, 186  
labium — labium 67, 68, 68, 97, 136, 137, 139, 141, 143–147, 148, 155, 163, 166, 175, 178, 180, 183–185, 187, 191, 192, 713  
labroepipharynx — labroepipharynx 139  
labrum — labrum 3, 15, 42, 43, 43, 97, 98, 100, 105, 106, 116, 123, 125, 127–131, 137, 138, 140, 141, 143–147, 149, 152, 155, 160, 162, 163, 166, 180, 186–188  
lac aperture — ostiolum laccae 730  
lac cell — cellula laccae 730  
*lacinella* → lacinial plate  
lacinia — lacinia 61, 63, 65, 66, 99, 109, 111, 118, 124, 147, 183, 184

- lacinial lobe — *lobus lacinialis* 61  
— plate — *lamina lacinialis* 61
- lamellate antenna — *antenna lamellata* 89
- laminate antenna — *antenna laminata* 85
- lamna — *lamna* 573
- lancet — *lancea* 510
- lateral abdominal spine — *spina abdominalis lateralis* 496  
— apex of pronotum — *apex pronotalis lateralis* 216  
— cervical sclerite — *lamina cervicalis lateralis* 195, 196, 215  
— — sclerites — *laminae cervicales laterales* (*pl.*) 233  
— endomere — *endomeron laterale* 538, 539  
— gonapophysis — *gonapophysis lateralis* 434, 562  
— lobe — *lobus lateralis* 509, 511, 512, 523–525, 626  
— margin of gula — *clavus gularis lateralis* 49  
— — — postlabrum — *clavus postlabralis lateralis* 43  
— — — posttrochanter — *clavus posttrochanteralis lateralis* 265  
— — — prelabrum — *clavus praelabralis lateralis* 43  
— — — pronotum — *clavus pronotalis lateralis* 216, 217  
— — — sternum — *clavus sternalis lateralis* 203  
— ocelli — *ocelli stemmatis* 25  
— ocellus — *ocellus lateralis* 3  
— palate — *palatum laterale* 143  
— phallic lobe — *lobus phallicus lateralis* 461  
— sclerite — *lamina lateralis* 584  
— scutellar bristle — *seta scutellaris lateralis* 668  
— sinus of pronotum — *sinus pronotalis lateralis* 219  
— subgenital lobe — *lobus subgenitalis lateralis* 610, 612  
— suture of pronotum — *sutura pronotalis lateralis* 217
- latero-orbicular crown of pronotum — *corona pronotalis orbicularis lateralis* 218
- leg — *pes* 253, 254
- ligula — *ligula* 72, 74, 107, 137, 143, 147, 428, 429
- lima — *lima* 714, 715, 720
- line — *linea* 690
- lobe — *lobus* 689
- longitudinal crest of pronotum — *crista pronotalis longitudinalis* 216, 221  
— basal line — *linea basalis longitudinalis* 732  
— furrow of clypeus — *fossa clypealis longitudinalis* 40  
— — — front — *fossa frontalis longitudinalis* 38  
— — — labrum — *fossa labralis longitudinalis* 42  
— line of clypeus — *linea clypealis longitudinalis* 41  
— — — frons — *linea frontalis longitudinalis* 39  
— — — labrum — *linea labralis longitudinalis* 43  
— — — pronotum — *linea pronotalis longitudinalis* 217  
— medial line — *linea medialis longitudinalis* 732  
— submarginal line — *linea submarginalis longitudinalis* 732

- longitudinal suture of vertex — sutura verticalis longitudinalis 3  
lorum — lorum 5, 107, 108  
lower apex of molar lobe — apex lobi molaris inferior 53  
— — — ovipositor — apex ovipositoris inferior 403  
— apical margin of coxa — clavus coxialis apicalis interior 262  
— basal lobe of femur — lobus femoralis basalis inferior 266  
— epimeral sclerite of mesothorax — katepimeron mesothoracale 240  
— — — metathorax — katepimeron metathoracale 240  
— — — prothorax — katepimeron prothoracale 233, 240  
— episternal sclerite — katepisternum 238  
— — — of mesothorax — katepisternum mesothoracale 226, 233  
— — — metathorax — katepisternum metathoracale 231, 233  
— — — prothorax — katepisternum prothoracale 213, 233  
— genital lobe — lobus genitalis inferior 601–606  
— inner ventrolateral crest of femur — corona femoralis ventrolateralis internoinferior 255  
— orbital bristle — seta orbitalis inferior 666  
— plate — lamina inferior 577, 578  
— valve — valva inferior 479  
lumen — lumen 727, 729  
lunar sclerite — lamina lunaris 584, 586

*malar space* → gena

- mandible — mandibula 15, 52, 52–60, 53, 95, 97, 98, 102, 102, 103, 106, 109, 124, 125, 136, 145–147, 161, 163, 166, 174–179, 184, 186, 188, 192  
mandibles — mandibulae (*pl.*) 141, 164  
mandibular cavity — cavea mandibularis 53  
— denticle — denticulus mandibularis 52  
— process — processus mandibularis 52  
— *toothlet* → mandibular denticle  
manica — manica 595, 597  
manubrium — manubrium 413, 416, 497, 524  
margin of antennal socket — clavus cavi antennalis 3  
— — pedicel — clavus pedicellaris 77  
marginal line — linea marginalis 732  
— ring — annulus marginalis 570  
— spine — spina marginalis 596  
— vein — vena marginalis 300, 301  
margo — margo 596  
maxilla — maxilla 61, 61, 105, 106, 127, 136–138, 144–146, 163, 165, 166, 174–182, 186, 188, 191  
maxillae — maxillae (*pl.*) 141, 164  
maxillary canal — canalis maxillaris 182  
— cavity — cavea maxillaris 61  
— comb — ctenidium maxillare 65  
— lancet — spina maxillaris 181, 181, 185

- maxillary lobe — lobus maxillaris 183, 185  
— palp — palpus maxillaris 61–64, 62, 62–66, 95–97, 99, 101, 103, 107–109, 111, 118, 119, 121, 123–129, 131, 135, 141, 155, 180, 183–185, 192, 722
- maxillula* → hypopharynx
- medial anal cell — cellula analis medialis 321  
— axillary plate — lamina axillaris medialis 299, 311  
— discal spot — macula discalis medialis 731  
— endomere — endomeron mediale 538, 539  
— incision — fissura medialis 483  
— jugal cell — cellula iugalis medialis 325  
— lobe — lobus medialis 509, 511–513  
— process of scutum — processus scutalis medialis 206  
— radial cell — cellula radialis medialis 312  
— sclerite — lamina medialis 584  
— subgenital lobe — lobus subgenitalis medialis 610, 612  
— valvifer — valvifer medialis 533  
— zone — zona medialis 311
- median area — area medialis 311, 316  
— cell — cellula medialis 316  
— cervical sclerite — lamina cervicalis medialis 195  
— fork — furca medialis 316  
— gonapophysis — gonapophysis medialis 434  
— lobe — lobus medianus 525  
— ocellus — ocellus medialis 3  
— palate — palatum mediale 143  
— subjoint of tarsus — tarsomeron mediale 254, 268  
— vein — media 298, 299, 302, 303, 307, 309–313, 316–318, 320
- medigynium — medigynium 573, 573
- mediocubital area — area mediocubitalis 319  
— crossvein — vena transversalis mediocubitalis 311  
— vein — vena mediocubitalis 319
- mediolongitudinal crown of pronotum — corona pronotalis mediolongitudinalis 219
- medioradial area — area medioradialis 320
- mediuncus — mediuncus 557
- membrane — membrana 306–308, 589, 655  
— (spiracle) — valva (spiraculum) 704, 705
- mental carina — carina mentalis 67  
— process — processus mentalis 67  
— suture — sutura mentalis 68
- mentum — mentum 28, 68–74, 98–100, 104–110, 149, 152–154
- meron — meron 261
- meropodite* → femur
- mesepimeron — mesepimeron 196, 198, 200, 222, 225, 234
- mesepisternite — mesepisternum 195, 196, 198, 200, 222, 223, 225
- mesocorium — mesocorium 308

- mesocoxal articulation — articulatio mesocoxalis 209  
— bristle — seta mesocoxalis 667  
— cavity — cavea mesocoxalis 193, 194, 201, 208  
— furrow — fossa mesocoxalis 208, 222  
— suture — sutura mesocoxalis 200  
mesonotal suture — sutura mesonotalis 196, 208  
mesonotum — mesonotum 1, 193–196, 208, 222, 241  
mesopleural bristle — seta mesopleuralis 667  
— furrow — fossa mesocoxalis 208, 209, 222  
— suture — sutura mesopleuralis 196, 198, 225  
mesopleuron — mesopleuron 193–195, 208, 209, 222, 225, 237  
mesoscutellum — mesoscutellum 198, 222, 242  
mesoscutum — mesoscutum 198, 209, 222, 242  
mesosoma — mesosoma 541, 542  
mesosternal fork — furca mesosternalis 239  
mesosternum — mesosternum 1, 193, 195, 198, 208, 225, 234, 236, 239  
mesothoracic acrotergite — acrotergum mesothoracale 222  
— basisternum — basisternum mesothoracale 222–224, 226, 233, 240  
— furcasternum — furcasternum mesothoracale 240  
— paranotum — paranotum mesothoracale 195  
— postnotum — postnotum mesothoracale 195, 196  
— postscutum — postscutum mesothoracale 222  
— poststernite — poststernum mesothoracale 224  
— prescutum — praescutum mesothoracale 222, 224  
— presternite — praesternum mesothoracale 223, 224  
— spiracle — spiraculum mesothoracale 198, 200, 210  
mesothorax — mesothorax 193–195, 222, 222–226  
mesotrochantin — mesotrochantinus 195, 222, 233, 239  
mesovertex — mesovertex 3  
mesozona — mesozona 196  
metacoxal bristle — seta metacoxalis 667  
— cavity — cavea metacoxalis 193, 194, 234, 711  
— furrow — fossa metacoxalis 227  
metacoxopleural process — processus metacoxopleuralis 227  
metanotum — metanotum 1, 193–196, 227, 241  
metaparamere — metaparameron 482  
metapleural furrow — fossa metapleuralis 196, 227  
— suture — sutura metapleuralis 198, 200  
metapleuron — metapleuron 193–195, 198, 227  
metapygidium — metapygidium 497  
metascutellum — metascutellum 198, 227, 242  
metascutum — metascutum 198, 227, 242  
*metaspiracle* → metathoracic spiracle  
metasternum — metasternum 1, 193–195, 198, 230, 232, 234–236  
metatarsus — metatarsus 254, 268

- metathoracic acrotergite — acrotergum metathoracale 196  
— basisternum — basisternum metathoracale 228, 229, 231, 232  
— furcasternum — furcasternum metathoracale 228, 229, 231  
— paranotum — paranotum metathoracale 195  
— pleurosternum — pleurosternum metathoracale 239  
— postnotum — postnotum metathoracale 195, 196  
— postscutum — postscutum metathoracale 227  
— poststernite — poststernum metathoracale 228, 229, 240  
— prescutum — praescutum metathoracale 198, 227  
— presternite — praesternum metathoracale 228, 229, 231  
— spiracle — spiraculum metathoracale 198, 222, 227  
metathorax — metathorax 193–195, 227, 227–232  
metasternal fork — furca metasternalis 239  
— suture — sutura metasternalis 228  
metatrochantin — metatrochantinus 195, 227, 236, 238  
metavertex — metavertex 3  
metazona — metazona 196  
metepimeron — metepimeron 196, 198, 200, 227, 234, 235  
metepisternite — metepisternum 195, 196, 198, 227–229, 231  
microsculpture — microsculptura 629–650  
middle coxa — mesocoxa 2, 195, 196, 198, 200, 201, 209, 224–226, 233, 235–239  
— joint of labial palp — artus palpi labialis medialis 67, 69  
— — — maxillary palp — artus palpi maxillaris medialis 61, 62  
— radial vein — radius medialis 301  
— trochanter — mesotrochanter 209  
— *trochantin* → mesotrochantin  
*mirror* → specular membrane  
*mola* → molar  
molar — mola 52  
— crown — corona molaris 53  
— denticle — denticulus molaris 53  
— lobe — lobus molaris 53  
mouth cavity — cavea epistomatalis 98  
— opening — porta epistomatalis 100, 129  
— parts — instrumenta cibarii (*pl.*) 2  
mucro — mucro 413, 416  
mucronate antenna — antenna mucronata 86  
multicellular external process — processus externalis multicellularis 685–694  
— internal process — processus internalis multicellularis 695–702  
mystax — mystax 666
- nail* → claw  
*neck* → cervical sclerite  
*nerve* → vein  
ninth laterotergite — laterotergum nonum 617

- ninth sternite — sternum nonum 372, 391, 400, 414, 421, 425, 438, 447, 454, 463, 474, 502, 503, 505, 514, 515, 521, 553, 557, 564, 565, 568, 569, 571, 579, 580, 582, 585, 594, 603, 604, 609, 610, 614
- tergite — tergum nonum 372, 391, 404, 406, 413, 419, 420, 422, 424, 427, 434, 436, 443–446, 450–453, 459, 465, 481, 499, 504, 507, 508, 514, 515, 517–519, 543, 544, 546, 548–550, 553–557, 559, 560, 563, 564, 568, 570, 572, 574, 577, 578, 580, 589, 595, 601, 602, 605, 606, 610, 617, 625
- tergosternite — tergosternum nonum 441, 442, 607, 608
- node — nodus 715
- nodeule — nodulus 336
- non-cellular cuticular process — processus cuticularis noncellularis 629–650
- notal suture — sutura notalis 204
- notopleural bristle — seta notopleuralis 667, 668
- notum — notum 196, 204, 667, 668
- occipital acanthus — acanthus occipitalis 17
- foramen — foramen occipitale 28, 29, 48, 49
- hair — cilium occipitale 666
- suture — sutura occipitalis 15, 28, 33, 50
- occiput — occiput 15, 28, 50, 51
- ocellar bristle — seta ocellaris 665
- plate — lamina ocellaris 665
- ocellus — ocellus 665
- ocular cavity — cavea ocularis 3
- oedoeagus* → aedeagus
- oesophagus — oesophagus 98, 100, 104, 105
- opening of Johnston's organ — porta 713–715
- operculum — operculum 473, 475, 477, 478, 479, 481
- oral cavity — cavea oralis 132
- orbicular cervical sclerite — lamina cervicalis orbicularis 214, 215
- circle — circulus orbicularis 299, 311
- margin of postocciput — clavus postoccipitalis orbitalis 28
- outer apical margin of stipes — clavus stipitalis apicalis exterior 61
- articulation of mandible — articulatio mandibularis exterior 52
- axillary lobe — lobus axillaris exterior 369
- dorsolateral crest of femur — corona femoralis dorsolateralis exterior 255, 266
- epistomal margin of vertex — clavus verticalis epistomatalis exterior 3, 15
- furrow of mandible — fossa mandibularis exterior 53
- margin of appendage — clavus appendicularis exterior 487
- — — cercus — clavus cercalis exterior 433, 494
- — — galea — clavus galealis exterior 61
- — — lacinia — clavus lacinialis exterior 61
- — — mandible — clavus mandibularis exterior 53
- occipital bristle — seta occipitalis exterior 665
- orbit → postocular area

- outer ramus — *ramus externus* 428, 429  
— spur — *calcar exterius* 267  
— *squama* → outer axillary lobe  
— subanal lobe — *lobus subanalis exterior* 439  
— ventrolateral crest of femur — *corona femoralis ventrolateralis exterior* 255, 266  
— vertical bristle — *seta verticalis exterior* 665  
ovary — *ovarium* 399, 505, 599  
oviduct — *oviductus* 409, 468, 469  
ovipositor — *ovipositor* 1, 400, 400, 402, 403, 403, 420, 436, 437, 457, 466, 467, 468, 469, 470, 470–472, 531, 533, 535, 536, 547, 548, 561, 577, 593, 617, 618–620, 624, 627
- pallium — *pallium* 391
- papilliform process — *processus papilliformis* 564
- paraclypeus* → *postclypeus*
- paracoxal suture — *sutura paracoxalis* 235
- paraglossa — *paraglossa* 67, 68, 70, 71, 99, 101, 107–109, 112, 123, 188
- paraglossal plate — *lamina paraglossalis* 68
- paramere — *parameron* 392, 482, 487, 530, 538, 539, 541, 542, 544–546, 552, 557, 566, 575, 591, 592
- parameres — *paramera* (*pl.*) 390
- parapenial lobe — *lobus parapenialis* 527
- paraphallus — *paraphallus* 588, 589
- paraphysis — *paraphysis* 132, 148
- parapodial plate* → *paraproct*
- paraproct — *paraproctum* 372, 389, 391, 400, 403, 413, 419, 425, 436, 438, 446–449, 459–461, 465, 467, 475, 497, 502, 519, 520, 556, 577, 578, 621
- parapsidal furrow — *sutura parapsidalis* 200
- patella — *patella* 296
- pectinate antenna — *antenna pectinata* 93
- pedicel — *pedicellus* 76, 77, 77, 104, 723, 724
- pedunculus — *pedunculus* 595
- peniculus — *peniculus* 596
- penis — *penis* 390–392, 425, 441, 503, 508, 526, 528, 538, 541, 542, 549, 576, 588, 589, 601, 602
- tube — *tubus* 584
- valve — *valva* (*penis*) 526–528
- pentagonal area* → *frons*
- penultimate sternite* (Dermaptera) → *supra-anal plate*
- penuncus — *penuncus* 566
- periandrium — *periandrium* 575
- perigynium — *perigynium* 409
- periphallus — *periphallus* 408
- peristomial bristle — *seta peristomatalis* 666
- peritreme — *peritrema* 704

- phallic tube — thecabasis 393  
phallobase — phallobasis 389, 391, 393–395, 397, 398, 529, 530, 566, 581  
phallocrypt — phallocrypta 393, 395, 395  
phallotheca — phallotheca 389, 393, 396, 396, 398, 398, 581, 613, 615, 616  
phallothecal appendage — processus phallothecae 615  
phallotreme — phallotrema 393, 394, 459, 581, 623  
phallus — phallus 393, 393–398, 432, 463, 613, 615, 616  
pileolus — pileolus 457  
*pivotal process* → antennifer  
placodeum — placodeum 678  
plantar surface — planta pulvillata 269  
plate — lamina 691  
plectrum — plectrum 713  
pleural suture — sutura pleuralis 204, 206, 235, 260, 298  
— *wing process* → dorsal process of mesopleuron  
pleuron — pleuron 202, 206, 259, 748, 749  
pleurosternal intersegmental membrane — phragma intersegmentale pleurosternale 748  
pleurosternum — pleurosternum 236–238  
pleurostoma — pleurostoma 15, 48, 51, 51  
pleurostomal plate — lamina pleurostomatalis 106  
plumose antenna — antenna plumata 91  
*poiser* → halter  
poison canal — canalis venenatus 537  
*pollen basket* → corbicle  
pollex — pollex 596  
pons valvularum — pons valvularum 467  
postalar bristle — seta postalaris 667, 668  
postclypeus — postclypeus 40, 162, 166  
postcubital area — area postcubitalis 311  
— vein — postcubitus 298, 299, 302, 303, 309–311  
posterior — see also hind  
— apex of pronotum — apex pronotalis posterior 216  
— articulation of coxa — articulatio coxalis posterior 262  
— — — mandible — articulatio mandibularis posterior 53  
— — — pleurostoma — articulatio pleurostomatalis posterior 15, 51  
— basal margin of subcoxa — clavus subcoxalis basalis posterior 263  
— basicostal suture — sutura basicostalis posterior 262, 263  
— coronal suture — sutura coronalis posterior 3, 28  
— hamule — hamulus posterior 428, 429  
— lip — lobus spiracularis posterior 703  
— lobe (genital) — lobus posticus 525  
— *lobe* (wing) → alula  
— — of pleurostoma — lobus pleurostomatalis posterior 51  
— — — subtrochanter — lobus subtrochanteralis posterior 265  
— — — trochanter — lobus trochanteralis posterior 264

- posterior margin of mesoscutum — clavus mesoscutalis posterior 222  
— — — metasternum — clavus metasternalis posterior 193, 194  
— — — notum — clavus notalis posterior 204  
— — — pleuron — clavus pleuralis posterior 206  
— — — pleurostoma — clavus pleurostomatalis posterior 51  
— — — pronotum — clavus pronotalis posterior 193, 194, 210, 217  
— — — scutum — clavus scutalis posterior 206  
— — — sternite (abdomen) — clavus sternalis posterior (abdomen) 403  
— — — sternopleuron — clavus sternopleuralis posterior 203  
— — — sternum (thorax) — clavus sternalis posterior (thorax) 203  
— — — tergite — clavus tergalis posterior 202  
— — — trochanteral apex — clavus trochanteralis apicalis posterior 264  
— median vein — media posterior 300  
— ocular margin — clavus ocularis posterior 3, 15, 28  
— paramere — parameron posterius 589, 590  
— process of scutum — processus scutalis posterior 206  
— sclerite of median vein — lamina medialis posterior 299  
— tergal fissure — sutura scutalis posterior 200  
— transversal basal line — linea basalis transversalis posterior 732  
— tympanal trachea — trachea tympanalis posterior 710  
posterobasal jugal cell — cellula iugalis posterobasalis 325  
postero-medial process of scutum — processus scutalis posteromedialis 206  
postfrontal suture — sutura postfrontalis 3, 15  
postfrons — postfrons 39  
postgenal bridge — ponticulus postgenalis 33  
postgena — postgena 48–50  
postgula — postgula 48, 49  
posthumeral bristle — seta posthumeralis 667, 668  
postlabrum — postlabrum 42  
postmedial zig-zag line — linea angulatoflexuosa postmedialis 732  
— irregular spot — macula irregularis postmedialis 731  
— wavy line — linea undulata postmedialis 732  
postmentum — postmentum 95, 126  
postnotum — postnotum 204, 298, 299  
postoccipital articulation — articulatio postoccipitalis 15, 28  
— suture — sutura postoccipitalis 15, 28  
postocciput — postocciput 15, 28, 51  
postocular area — area postocularis 15  
postpetiolar plate — lamina postpetiolaris 718  
postscutellar bristle — seta postscutellaris 667  
postspiracular sclerite of mesothorax — lamina postspiracularis mesothoracalis 198  
— — — metathorax — lamina postspiracularis metathoracalis 227  
posttrochanter — posttrochanter 265  
posttrochanter and subtrochanter — trochanter compositus 265  
postuncus — postuncus 525

- postvaginal plate — lamella postvaginalis 599  
postvertical bristle — seta postverticalis 665  
pre- — see also pro-  
prealar bristle — seta preealaris 667  
preapical scutellar bristle — seta scutellaris preeapicalis 668  
preclypeus — preeclypeus 40  
precostal vein — praecosta 302, 312  
precoxal bristle — seta preecoxalis 667  
— cavity — cavea preecoxalis 193, 194, 201, 233, 234, 238  
— suture — sutura preecoxalis 210  
prefrons — preefrons 39  
pregula — preegula 48, 49  
prejugal vein — vena preeiugalis 325  
prelabrum — praelabrum 42  
prementum — praementum 68, 74, 95, 99, 101, 112, 126, 131–133, 143, 148, 149, 153  
*preoral food pocket* → cibarium  
prepectus — epicnemium 198  
prescutal suture — sutura preescutalis 206  
prescutum — praelatum 206, 298, 299  
presternal suture — sutura preesternalis 205–207  
presternite — preesternum 204–207  
prestomal tooth — denticulus preestomatalis 132, 154  
presutural bristle — seta preesuturalis 668  
pretarsal bristle — seta preetarsalis 274  
pretarsus — praelatus 254, 268, 270  
pretergal suture — sutura preetergalis 206  
pretergite — preetergum 206  
pretrochantin — praelatochanticus 195  
prevertex — preevertex 3  
pro- — see also pre-  
proboscis — proboscis 111, 113–117, 123, 129, 131, 136–139, 144–146, 149, 152–154, 153, 182, 183, 188–192, 189  
process of dorsoapical lobe of femur — processus lobi femoralis dorsoapicalis 266  
— — genital lobe — processus lobi genitalis 601, 604  
— — postoccipital articulation — processus articulationis postoccipitalis 28  
— — scape — processus scapalis 77  
— — superiolateral lobe of femur — processus lobi femoralis superiolateralis 266  
— — ventroapical lobe of femur — processus lobi femoralis ventroapicalis 266  
proctiger — proctiger 550–552, 579, 580, 582, 590, 614  
proepimeron — proepimeron 210, 234, 237, 238  
proepisternite — proepisternum 210  
pronotum — pronotum 1, 193–196, 198, 210, 216, 217, 241, 242  
proparasternite — proparasternum 212  
prophallus — prophallus 428, 429, 432

- propleural bristle — seta propleuralis 667  
— suture — sutura propleuralis 210
- propleuron — propleuron 193–196, 198, 210
- propodeum — propodeum 196, 198, 200, 206
- prosternal suture — sutura prosternalis 234
- prosternum — prosternum 1, 193–195, 200, 236, 238
- prothoracic basisternum — basisternum prothoracale 210–215, 233, 234, 240  
— eutrochantin — eutrochantin prothoracale 233  
— furcasternum — furcasternum prothoracale 210–215, 233, 240  
— parasternite — parasternum prothoracale 212  
— pleurosternum — pleurosternum prothoracale 240  
— poststernite — prosternum prothoracale 212  
— presternite — praesternum prothoracale 211–213, 233, 234  
— spinasternum — spinasternum prothoracale 211, 213, 215
- prothorax — prothorax 193–195, 210, 210–221, 239, 240
- proximal arm — ramus proximalis 585  
— plate — lamina proximalis 576
- prozona — prozona 196
- prozonal suture — sutura prozonalis 196
- pseudepiphallus — pseudepiphallus 460
- pseudo-ovipositor* (Trichoptera) → tenth tergosternite
- pseudopenis — pseudopenis 539
- pseudosternite — pseudosternum 461
- pseudotracheal collecting channel — canaliculus pseudotrachealis 131  
— membrane — phragma pseudotracheale 132
- pteropleural bristle — seta pteropleuralis 667
- pterostigma — pterostigma 312
- pterostigmatic cell — cellula pterostigmatalis 316  
— crossvein — vena transversalis pterostigmatalis 312
- pterothorax — pterotheorax 2, 239, 240
- pulmonary space — pulmonarium 376, 572
- pulvillus — pulvillus 276–278
- pumping bulb* → capsula
- pygidial apex — apex pygidialis 490  
— denticle — denticulus pygidialis 493  
— margin — clavus pygidialis 491
- pygidium — pygidium 433, 489, 490–493, 494, 497
- pygofer — pygofer 613, 616, 625, 626
- radial and median vein — radius et media 310  
— area — area radialis 311, 313, 315  
— cell — cellula radialis 315, 316  
— fork — furca radialis 315  
— irregular spot — macula irregularis radialis 731  
— vein — radius 298–300, 302, 303, 310, 311, 314, 319, 320

- radiomedian crossvein — *vena transversalis radiomedialis* 311  
ramus of cingulum — *ramus cingularis* 459  
raster — *radula* 154  
rectum — *rectum* 393, 399, 452, 503, 508, 514, 515, 565, 593, 595, 599, 613, 621  
recurrent vein — *vena recurrens* 313  
remigial margin — *costa remigialis* 311  
— region — *regio remigialis* 304, 305, 311, 311  
reticular comb of genital lobe — *reticulum lobi genitalis* 485  
reticulate anal vein — *vena analis reticularis* 323  
rostellum — *rostellum* 595  
rostrum — *rostrum* 103–106, 129, 130, 148, 155, 162  
row of antemedial lines — *series linearis antemedialis* 732  
— — apical dots — *series punctorum apicalium* 731  
— — — spots — *series maculorum apicalium* 731  
— — pegs — *series denticulorum* 716, 717  
ruga — *ruga* 586
- sacculus — *sacculus* 595–598  
soccus — *soccus* 595–597  
salivary canal — *canalis salivarius* 98, 136–140, 144, 146, 147, 149–152, 174–179, 183, 191, 192  
sarothrum — *sarothrum* 296  
saw-case (Homoptera) → third valve  
scape — *scapus* 76–80, 77, 96, 104, 105, 723, 724  
scaphium — *scaphium* 595, 596  
scapula — *scapula* 299  
scent aperture — *ostium odoriferum* 727, 729  
scolopale — *scolopodium* 710  
scolopophore — *scolopophora* 709, 710  
*scopa* → brush  
scrobe — *scrobiculus* 103  
scutellar suture — *sutura scutellaris* 206  
scutellum — *scutellum* 200, 206, 299, 667, 668  
scutum — *scutum* 2, 200, 206, 298, 299  
second abdominal sternite — *sternum abdominale secundum* 234  
— anal vein — *vena analis secunda* 298, 310, 321  
— *clypeus* → *preclypeus*  
— cubital vein — *cubitus secundus* 302  
— jugal vein — *vena cardinalis* 299, 300, 310, 325, 329  
— median vein — *media secunda* 302, 313  
— medisternite — *medisternum secundum* 507  
— phallomere — *phallomeron secundum* 456  
— radial vein — *radius secundus* 302, 309, 312, 313  
— sternite — *sternum secundum* 372, 572  
— tergite — *tergum secundum* 372, 429

- second valve — valva secunda 402, 406, 451, 453, 457, 465–467, 471, 519, 520, 535–537, 624, 625, 627  
sectorial crossvein — sector radii 302, 303, 309, 310, 312, 319  
segmentation — segmentatio 716–720  
seminal duct — ductus seminalis 599  
— vesicle — vesicula seminalis 503  
sense cell — cellula sensillaris 655, 659  
sensilla trichodea — sensilla trichodea (*pl.*) 655–658  
sensory nerve — nervus sensillaris 657, 658  
— pit — caverna sensillaris 702  
setigerous antenna — antenna setigera 88  
seventh sternite — sternum septimum 372, 427, 505, 514, 540, 548, 559, 561, 562, 564, 572  
— tergite — tergum septimum 372, 427, 451, 571, 728  
short elytron — elytron brevissimum 250  
*shoulder* → humerus  
simple hair sensillum — sensillum epidermatale 655  
— trochanter — trochanter simplex 264  
*siphon* → syphon  
sixth median vein — media sexta 302  
— sternite — sternum sextum 372, 570  
— tergite — tergum sextum 372, 516, 570, 571, 728  
— tergoabdominal bridge — ponticulus tergoabdominalis sextus 570  
— tergosternite — tergosternum sextum 567  
socius — socius 595, 597, 598  
sole — planta 253  
space between submarginal spots — spatium maculationis submarginalis 731  
spathulate antenna — antenna spathulata 84  
specillum — specillum 442, 444  
specular membrane — membrana specularis 714  
spermatheca — receptaculum seminis 399, 505, 515, 593  
spermatheca — spermatheca 468, 514, 599  
sperm capsule — vesicula spermatis 428, 429, 432  
spinasternum — spinasternum 239  
spine — spina 213, 214, 408, 428, 687  
— of supra-anal lobe — spina lobi supraanalis 498  
spiracle — spiraculum 703–708  
spiracular atrium — cavea spiracularis 704  
— corona — corona spiracularis 705  
spiral tongue — lingua spiralis 116  
spur — calcar 253, 268  
sternal process — processus sternalis 409  
— suture — sutura sternalis 205–207, 234, 235, 749  
sternellum — sternellum 204, 205, 207  
sternite — sternum 202–206, 237, 258, 390, 677, 746, 748

- sternocostal suture — sutura sternocostalis 211  
sternopleural bristle — seta sternopleuralis 667  
— process — processus sternopleuralis 202–204  
— suture — sutura sternopleuralis 204–207, 209  
*sternopleurite* → *sternopleuron*  
sternopleuron — sternopleuron 202–204, 667  
stigmatic bristle — seta stigmaticalnis 667  
stipes — stipes 61–66, 99, 101, 107–109, 111, 118–122, 126, 129  
— (genital) — stipes (genitalis) 408  
stipital cavity — cavea stipitalis 61  
— process — processus stipitalis 61  
stridulatory area — area stridens 718, 721  
— carinae — carinae stridentes (*pl.*) 720  
— comb — pecten stridens 719  
— plate — lamina stridens 721  
— vein — vena stridens 714  
styloideum — styloideum 617  
style — stylus 404, 405, 408–410, 418–423, 427, 434, 437, 454, 456, 504, 514, 515,  
540, 544, 545, 565, 567, 589, 625  
*stylus* (Neuroptera) → papilliform process  
subalare — parapteron epimerale 298  
subalveole — subalveolus 656  
subanal lobe — lobus subanal 438, 440, 443, 445  
— plate — lamina subanal 562, 565, 568, 570  
— vomer — vomer subanal 474, 475  
subantennal suture — sutura subantennalis 3, 15, 50  
subapical scutellar bristle — seta scutellaris subapicalis 668  
subatrium — subatrium 708  
subcostal area — area subcostalis 311, 312  
— cell — cellula subcostalis 312, 319  
— crossvein — vena transversalis subcostalis 312  
— vein — subcosta 298, 299, 302, 303, 309–311, 314  
subcoxa — subcoxa 263  
subcoxal suture — sutura subcoxalis 263  
subcubital vein — vena subcubitalis 307  
subepidermal sensillum — sensillum subepidermatale 657  
subgenal suture — sutura subgenalis 15, 50, 51  
subgenital denticle — denticulus subgenitalis 445  
— fastigium — fastigium subgenitale 443, 447, 464, 476  
— lobe — lobus subgenitalis 437, 439, 440, 443–446, 465, 549–551, 558, 559, 561, 570,  
573  
— plate — lamina subgenitalis 391, 392, 430, 450–454, 456, 458, 460–464, 519, 520, 548,  
554–556, 589  
subjoint of maxillary palp — articulus palpi maxillaris 123  
sublateral lobe — lobus sublateralis 525

- submarginal dot — punctum submarginale 731  
— irregular spot — macula irregularis submarginalis 731  
— parallel lines — lineae parallelae submarginales (*pl.*) 732  
— oval spot — macula ovata submarginalis 731  
submental carina — carina submentalalis 67  
— lobe — lobus submentalalis 67  
— suture — sutura submentalalis 68  
submentum — submentum 28, 31, 68, 71–74, 98, 100, 107–109  
subocular area — area subocularis 15  
— suture — sutura subocularis 3, 15, 50  
subscaphium — subscaphium 595  
subspiracular sclerite of mesothorax — lamina subspiracularis mesothoracalis 198  
subtrochanter — subtrochanter 265  
*sucker* → haustellum  
sucking apparatus — instrumenta suctoria 117  
superior margin of trochanteral apex — clavus trochanteralis apicalis superior 264  
*supplementary lobe* → anal appendage  
supra-alar bristle — seta supraalaris 667, 668  
supra-anal denticle — denticulus supraanalis 441  
— lobe — lobus supraanalis 438–440, 442, 444–446, 448, 498, 499  
— plate — lamina supraanalis 474, 565, 568, 570  
*supraclypeus* → postclypeus  
supragenital plate — lamina supragenitalis 447, 449  
— lobe — lobus supragenitalis 612  
*suranal plate* → epiproct  
surstylus — surstylus 588, 589  
suture — sutura 695, 696  
syphon — siphon 187
- tail — cauda 409  
*tambour* → tegmen (genital)  
tarsal bristle — seta tarsalis 274  
— hairs — cilia tarsalia (*pl.*) 269  
— lobe — lobus tarsalis 268  
— process — processus tarsalis 268  
tarsus — tarsus 253, 268, 268, 296  
tegmen — tegmen 309, 344  
— (genital) — tegmen (genitale) 508–513  
tegula — tegula 196, 299  
tegumen — tegumen 597  
telomere — telomeron 538  
tendon — tendon 522  
tenth tergite — tergum decimum 372, 391, 400, 412, 414, 419, 424, 425, 427, 433, 435, 439, 442, 444–446, 448–452, 454, 456, 458, 459, 465, 473, 474, 479, 480, 488,

- 497, 499, 500, 501, 503–505, 507, 508, 534, 559, 560, 563, 564, 568, 572, 574, 577, 578, 594, 595, 601, 605, 606, 610  
— sternite — sternum decimum 504, 505, 507, 508, 534, 563, 609, 610  
— tergosternite — tergosternum decimum 440, 571, 607, 611  
tentorial pit — fovea tentorialis 38  
*terebra* — *terebra* 434  
tergal process — processus tergalis 500  
tergite — tergum 202, 746, 748  
tergopleural intersegmental membrane — phragma intersegmentale tergopleurale 748  
terminal appendage — appendicula terminalis 426  
— filament — filum terminale 417–419  
— *phallic spine* → virga  
— process — processus terminalis 616, 623  
theca — theca 588, 589  
*thigh* → femur  
third abdominal sternite — sternum abdominale tertium 235  
— anal vein — vena analis tertia 298, 303, 309, 310, 321  
— median vein — media tertia 302  
— radial vein — radius tertius 302, 312, 313  
— sternite — sternum tertium 372, 516  
— tergite — tergum tertium 372, 429  
— valve — valva tertia 402, 403, 406, 451, 453, 457, 465–467, 471, 472, 519, 520, 535, 536, 624–626  
thoracic comb — ctenidium thoracale 197  
— foramen — foramen thoracale 214, 215  
thorax — thorax 1, 193, 254, 310  
*throat sclerite* → gula  
tibia — tibia 253, 254, 256, 267, 267, 268, 294, 295, 717, 720  
tibial bristle — seta tibialis 267  
— comb — pecten tibialis 296  
— furrow — fossa tibialis 267  
— hairs — cilia tibialis (*pl.*) 267  
— *pecten* → tibial comb  
— spine — spina tibialis 267  
— toothlet — denticulus tibialis 267  
tigellus — tigellus 438  
tigillum — tigillum 142, 143  
titillator — titillator 389, 455, 461, 574, 601–603  
— (*Plecoptera*) → specillum  
*tongue* → ligula  
tongue-case — glossotheca 117  
*toothlet* → denticle  
trachea — trachea 704–707  
transtilla — transtilla 595, 597, 598  
transversal carina — carina transversalis 220

- transversal furrow — fossa transversalis 745  
 — — of clypeolabrum — fossa clypeolabralis transversalis 46  
 — — — clypeus — fossa clypealis transversalis 40  
 — — — frons — fossa frontalis transversalis 38  
 — — — frontoclypeus — fossa frontoclypealis transversalis 44  
 — — — labrum — fossa labralis transversalis 42  
 — — — pronotum — fossa pronotalis transversalis 217  
 — — line of clypeus — linea clypealis transversalis 41  
 — — — frons — linea frontalis transversalis 39  
 — — — gula — linea gularis transversalis 48  
 — — — labrum — linea labralis transversalis 43  
 — medial line — linea medialis transversalis 732  
 — submarginal line — linea submarginalis transversalis 732  
 — — — pronotum — sutura pronotalis transversalis 216, 217, 219  
 — suture of vertex — sutura verticalis transversalis 3  
 trichobothrium — trichobothrium 517, 518, 545, 548, 562  
 trochanter — trochanter 253, 254, 260, 261, 264, 264, 265, 265  
 trochantin — trochantinus 202, 204, 206, 258, 260, 261  
 trochus — trochus 296  
 truncate elytron — elytron truncatum 251  
 tube — tuba 522  
 twelfth sternite — sternum duodecimum 408, 409  
 tympanal air-chamber — camera tympanalis 710, 712  
 — cavity — cavea tympanalis 711, 712  
 — membrane — membrana tympanalis 710, 712  
 — orifice — porta tympanalis 709, 710
- ultimate tergite* (Dermaptera) → tenth tergite  
 uncus — uncus 595—598  
 unguitactor plate — lamina unguitactoralis 268, 270, 275  
 unicellular cuticular process — processus cuticularis unicellularis 651—654  
 upper apex of molar lobe — apex lobi molaris superior 53  
 — — — ovipositor — apex ovipositoris superior 403  
 — apical margin of coxa — clavus coxalis apicalis superior 262  
 — basal lobe of femur — lobus femoralis basalis superior 266  
 — genital lobe — lobus genitalis superior 601—603, 605, 606  
 — inner ventrolateral crest of femur — corona femoralis ventrolateralis internosuperior 255  
 — orbital bristle — seta orbitalis superior 666  
 — plate — lamina superior 577, 578  
 — valve — valva superior 479, 480
- vacuole — vacuolum 656, 657  
 vagina — vagina 399, 401, 469, 505, 514, 515, 525, 587, 599  
 vaginal aperture — ostium bursae 599

- vaginal fibula — *fibula vaginalis* 587  
— lobe — *lobulus vaginalis* 600  
valve ... *valva* 406, 407, 507  
valvifer — *valvifer* 406, 407  
valvula — *valvula* 497  
vannal fold — *plica vannalis* 303–305, 321  
— margin — *costa vannalis* 321  
— region — *regio vannalis* 299, 304, 305, 321, 321–324  
velum — *velum* 586  
ventral appendage — *appendicula ventralis* 431  
— articulation of antenna — *articulatio antennalis ventralis* 78  
— cervical sclerite — *lamina cervicalis ventralis* 233  
— endotendon — *endotendon ventrale* 584–586  
— femoral carina — *carina femoralis ventralis* 255, 266  
— genital lobe — *lobus genitalis ventralis* 521, 557  
— gonapophysis — *gonapophysis ventralis* 405, 421, 423, 548, 618–620  
— lobe — *lobus ventralis* 459, 589  
— margin of pleurostoma — *clavus pleurostomatalis ventralis* 51  
— — — posttrochanter — *clavus posttrochanteralis ventralis* 265  
— — — subtrochanter — *clavus subtrochanteralis ventralis* 265  
— — — valve — *clavus valvaris ventralis* 402, 403  
— maxillary lancet — *spina maxillaris ventralis* 190  
— paramere — *parameron ventrale* 574  
— phallic lobe — *lobus phallicus ventralis* 460, 461  
— plate — *lamina ventralis* 609, 624  
— pleural process — *processus pleuralis ventralis* 206  
— valve of aedeagus — *valva aedeagalis ventralis* 459  
— valvifer — *valvifer ventralis* 532  
— valvula — *valvula ventralis* 531, 532  
— virga — *virga ventralis* 584  
ventroapical lobe of femur — *lobus femoralis ventroapicalis* 266  
ventrobasal margin of trochanter — *clavus trochanteralis ventrobasis* 264  
ventrocoxa — *ventrocoxa* 262, 263  
ventrolateral margin of femur — *clavus femoralis ventrolateralis* 266  
— — — mesopleuron — *clavus mesopleuralis ventrolateralis* 193, 194  
— — — pleuron — *clavus pleuralis ventrolateralis* 202  
— — — pronotum — *clavus pronotalis ventrolateralis* 193, 194  
vertex — *vertex* 1, 3, 28, 100  
*vertical triangle* → *cuneus*  
vesica — *vesica* 595, 598, 615  
vesical appendage — *processus vesicae* 615  
— lobe — *lobus vesicae* 615  
vesicle — *vesicula* 584  
vestibulum — *vestibulum* 599  
vibrissa — *vibrissa* 666

vinculum — vinculum 595, 596, 598  
virga — virga 389, 391, 483, 486, 613  
volsella — voltsella 526  
volsellar digitus — digitus voltsellaris 526, 528, 529  
vulva — vulva 525

Wagner's organ — glandula (genitalis) 585  
wax chamber — camera cerea 726  
— cell — cellula cerea 730  
— plate — lamina cerea 726, 730  
wing — ala 209, 302

xyphus — xyphus 209, 238

zygoma — zygoma 459

